

SOUTHEASTERN BIOLOGY



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ASB **ASB 77TH ANNUAL MEETING** *ASB* **MARCH 31 – APRIL 3, 2016**

ASB **Davidson College, Davidson, North Carolina** *ASB*
Queens University of Charlotte, North Carolina
ASB **Charlotte Teachers Institute, North Carolina** *ASB*
University of North Carolina at Charlotte

ASB **Meeting Site: Convention Center at the** *ASB*
Embassy Suites Hotel, Concord, North Carolina

ASB

See Page 1 and Consult Website

<http://www.sebiologists.org>

ASB



Students (Biology Majors) at the entrance of the Baker-Watt Science Complex of Davidson College. From Left to Right: Emma Johnson, Aren Carpenter, Brielle Bowerman, Jaeyoung Lee, Alanna Horton, Katie Greene, Eli Teague, AnnaLee Tutterow, Eleanor Seaman, and Barney Beermann

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PURPOSE

The purpose of this association shall be to promote the advancement of biology as a science by encouraging research, the imparting of knowledge, the application of knowledge to the solution of biological problems, and the preservation of biological resources. The ASB has representation in Section G Committee of the AAAS. Varying types of membership are available to individuals and institutions. See inside back cover.

TIME AND PLACE OF FUTURE MEETINGS

2016 March 31-April 3: Featured Institutions – Davidson College, Davidson, NC; Queens University of Charlotte; The Charlotte Teachers Institute; and The University of North Carolina at Charlotte. Meeting site is the Embassy Suites, Charlotte-Concord, NC.

The City of Charlotte, North Carolina

From Wikipedia, the free encyclopedia

Charlotte /ˈʃɑːrlət/ is the largest city in the state of North Carolina. It is the county seat of Mecklenburg County and the second largest city in the Southeastern United States, just behind Jacksonville, Florida. Charlotte is the third fastest growing major city in the United States. In 2014, the estimated population of Charlotte according to the U.S. Census Bureau was 809,958, making it the 17th largest city in the United States based on population. The Charlotte metropolitan area ranks 22nd largest in the US and had a 2014 population of 2,380,314. The Charlotte metropolitan area is part of a sixteen-county market region or combined statistical area with a 2014 U.S. Census population estimate of 2,537,990. Residents of Charlotte are referred to as "Charlotteans". It is listed as a "gamma-plus" global city by the Globalization and World Cities Research Network.

Charlotte is home to the corporate headquarters of Bank of America and the east coast operations of Wells Fargo, which along with other financial institutions makes it the second largest banking center in the United States. Among Charlotte's many notable attractions, some of the most popular include the Carolina Panthers of the National Football League (NFL), the Charlotte Hornets of the National Basketball Association (NBA), the Charlotte Independence of the United Soccer League (USL), two NASCAR Sprint Cup races and the NASCAR All-Star Race, the Wells Fargo Championship, the NASCAR Hall of Fame, Carowinds amusement park, and the U.S. National Whitewater Center. Charlotte Douglas International Airport is a major international hub, and was ranked the 23rd busiest airport in the world by passenger traffic in 2013.

Nicknamed the *Queen City*, like its county a few years earlier, Charlotte was named in honor of Charlotte of Mecklenburg-Strelitz, who had become the Queen of Great Britain just seven years before the town's incorporation. A second nickname derives from the American Revolutionary War, when British commander General Cornwallis occupied the city but was driven out by hostile residents, prompting him to write that Charlotte was "a hornet's nest of rebellion", leading to the nickname *The Hornet's Nest*.

Charlotte has a humid subtropical climate. Charlotte is located several miles east of the Catawba River and southeast of Lake Norman, the largest man-made lake in North Carolina. Lake Wylie and Mountain Island Lake are two smaller man-made lakes located near the city.

History

Mecklenburg County was initially part of Bath County (1696 to 1729) of New Hanover Precinct, which became New Hanover County in 1729. The western portion of New Hanover split into Bladen County in 1734, its western portion splitting into Anson County in 1750. Mecklenburg County formed from Anson County in 1762, with further apportionment in 1792, with Cabarrus County formed from Mecklenburg, and in 1842, with Union County formed from Mecklenburg's southeastern portion. These areas were all part of one of the

original six judicial/military districts of North Carolina known as the Salisbury District.

The area that is now Charlotte was settled by people of European descent around 1755, when Thomas Spratt and his family settled near what is now the Elizabeth neighborhood. Thomas Polk (granduncle of U.S. President James K. Polk), who later married Thomas Spratt's daughter, built his house by the intersection of two Native American trading paths between the Yadkin and Catawba rivers. One path ran north–south and was part of the Great Wagon Road; the second path ran east–west along what is now Trade Street. Within decades of Polk's settling, the area grew to become "Charlotte Town", incorporating in 1768. The crossroads, perched atop the Piedmont landscape, became the heart of Uptown Charlotte.

In 1770, surveyors marked the streets in a grid pattern for future development. The east–west trading path became Trade Street, and the Great Wagon Road became Tryon Street, in honor of William Tryon, a royal governor of colonial North Carolina. The intersection of Trade and Tryon—commonly known today as "Trade & Tryon", or simply "The Square"—is more properly called "Independence Square".

While surveying the boundary between the Carolinas in 1772, William Moultrie stopped in Charlotte Town, whose five or six houses were "very ordinary built of logs".

In 1775, local leaders came together and signed the Mecklenburg Resolves, more popularly known as the Mecklenburg Declaration of Independence. While not a true declaration of independence from British rule, it is among the first such declarations that eventually led to the American Revolution. May 20, the traditional date of the signing of the declaration, is celebrated annually in Charlotte as "MecDec", with musket and cannon fire by reenactors in Independence Square. North Carolina's state flag and state seal also bear the date.

After the American Revolution

Charlotte is traditionally considered the home of Southern Presbyterianism, but in the 19th century, numerous churches, including Presbyterian, Baptist, Methodist, Episcopalian, Lutheran, and Roman Catholic formed, eventually giving Charlotte the nickname, "The City of Churches".

In 1799, in nearby Cabarrus County, 12-year-old Conrad Reed found a 17-pound rock, which his family used as a doorstep. Three years later, a jeweler determined it was nearly solid gold, paying the family a paltry \$3.50. The first documented gold find in the United States of any consequence set off the nation's first gold rush. Many veins of gold were found in the area throughout the 19th and early 20th century, leading to the 1837 founding of the Charlotte Mint. North Carolina was the chief producer of gold in the United States until the Sierra Nevada find in 1848, although the volume mined in the Charlotte area was dwarfed by subsequent rushes.

Some groups still pan for gold occasionally in local streams and creeks. The Reed Gold Mine operated until 1912. The Charlotte Mint was active until 1861, when Confederate forces seized it at the outbreak of the Civil War. The mint was not reopened at the war's end, but the building, albeit in a different location, now houses the Mint Museum of Art.

The city's first boom came after the Civil War, as a cotton processing center and a railroad hub. Charlotte's city population at the 1880 Census grew to 7,084.

WWI to present

Population grew again during World War I, when the U.S. government established Camp Greene north of present-day Wilkinson Boulevard. Many soldiers and suppliers stayed after the war, launching an urban ascent that eventually overtook older city rivals along the Piedmont Crescent.

The city's modern-day banking industry achieved prominence in the 1970s and 1980s, largely under the leadership of financier Hugh McColl. McColl transformed North Carolina National Bank (NCCNB) into a formidable national player that through aggressive acquisitions became known as NationsBank, eventually merging with BankAmerica to become Bank of America. Wachovia experienced similar growth, and was acquired by San Francisco-based Wells Fargo. Measured by control of assets, Charlotte is the second largest banking headquarters in the United States, after New York City.

On September 22, 1989, the city took a direct hit from Hurricane Hugo. With sustained winds of 69 mph (111 km/h) and gusts of 87 mph (140 km/h) in some locations, Hugo caused massive property damage, destroyed 80,000 trees, and knocked out electrical power to most of the population. Residents were without power for weeks, schools were closed for a week or more, and cleanup took months. The city was caught unprepared; Charlotte is 200 miles (320 km) inland, and residents from coastal areas in both Carolinas often wait out hurricanes in Charlotte.

In December 2002, Charlotte and much of central North Carolina were hit by an ice storm that resulted in more than 1.3 million people losing power. During an abnormally cold December, many were without power for weeks. Much of the damage was caused by Bradford pear trees, splitting apart under the weight of the ice.

Geography

According to the United States Census Bureau, the city has a total area of 297.68 square miles (771.0 km²), of which 297.08 square miles (769.4 km²) is land and 0.6 square miles (1.6 km²) is water. Charlotte lies at an elevation of 748 feet (228 m), as measured at Charlotte/Douglas International Airport.

Charlotte constitutes most of Mecklenburg County in the Carolina Piedmont. Charlotte center city sits atop a long rise between two creeks, Sugar Creek and

Irwin Creek and was built on the gunnies of the St. Catherine's and Rudisill gold mines.

Though the Catawba River and its lakes lie several miles west, there are no significant bodies of water or other geological features near the city center. Consequently, development has neither been constrained nor helped by waterways or ports that have contributed to many cities of similar size. The lack of these obstructions has contributed to Charlotte's growth as a highway, rail, and air transportation hub.

Cityscape



Uptown Charlotte's skyline

Charlotte has 199 neighborhoods radiating in all directions from Uptown. Biddleville, the primary historic center of Charlotte's African-American community, is west of Uptown, starting at the Johnson C. Smith University campus and extending to the airport. East of The Plaza and north of Central Avenue, Plaza-Midwood is known for its international population, including East Europeans, Greeks, Middle-Easterners, and Hispanics. North Tryon and the Sugar Creek area include several Asian-American communities. NoDa (North Davidson), north of Uptown, is an emerging center for arts and entertainment. Myers Park, Dilworth, and Eastover are home to some of Charlotte's oldest and largest houses, on tree-lined boulevards, with Freedom Park, arguably the city's favorite, nearby.

In 2012, the urban section of Little Sugar Creek Greenway was completed. Inspired in part by the San Antonio River Walk, and integral to Charlotte's extensive urban park system, it is "a huge milestone" according to Gwen Cook, greenway planner for Mecklenburg County Park and Recreation.

Park Road and the SouthPark area have an extensive array of shopping and dining offerings, with SouthPark essentially serving as a second urban core. Blossoming neighborhoods like Sedgefield, Dilworth and South End are great examples of that. A prominent feature of the SouthPark neighborhood is the 120-acre Park Road Park. Far South Boulevard is home to a large Hispanic community. Many students, researchers, and affiliated professionals live near UNC Charlotte in the northeast area known as University City.



Charlotte's SouthPark neighborhood

The large area known as Southeast Charlotte is home to many golf communities, luxury developments, mega-churches, the Jewish community center, and private schools. As undeveloped land within Mecklenburg has become scarce, many of these communities have expanded into Weddington and Waxhaw in Union County. Ballantyne, far south Charlotte, and nearly every area on the I-485 perimeter, have seen extensive growth over the past 10 years.

Since the 1980s in particular, Uptown Charlotte has undergone massive construction of buildings housing Bank of America, Wells Fargo, Hearst Corporation, Duke Energy, several hotels, and multiple condominium developments.

Climate and environment

Charlotte, like much of the Piedmont region of the southeastern United States, has a humid subtropical climate (Köppen *Cfa*), with four distinct seasons; the city itself is part of USDA hardiness zone 8a, transitioning to 7b in the suburbs in all directions except the south. Winters are short and generally cool, with a January daily average of 40.1 °F (4.5 °C). On average, there are 59 nights per year that drop to or below freezing, and only 1.5 days that fail to rise above freezing. April is the driest month, with an average of 3.04 inches (7.7 cm) of precipitation. Summers are hot and humid, with a daily average in July of 78.5 °F (25.8 °C). There is an average 44 days per year with highs at or above 90 °F (32 °C). Official record temperatures range from 104 °F (40 °C) recorded six times, most recently on July 1, 2012, down to -5 °F (-21 °C) as recently as January 21, 1985, the last of three occasions; the record cold daily maximum is 14 °F (-10 °C) on February 12 and 13, 1899, while, conversely, the record warm daily minimum is 82 °F (28 °C) on August 13, 1881. The average window for freezing temperatures is November 5 thru March 30, allowing a growing season of 220 days.

Charlotte is directly in the path of subtropical moisture from the Gulf of Mexico as it heads up the eastern seaboard, thus the city receives ample precipitation throughout the year but also many clear, sunny days; precipitation is generally less frequent in autumn than spring. On average, Charlotte receives 41.6 inches (1,060 mm) of precipitation annually, which is somewhat evenly distributed throughout the year, although summer is slightly wetter; annual precipitation has historically ranged from 26.23 in (666 mm) in 2001 to 68.44 in (1,738 mm) in

1884. In addition, there is an average of 4.3 inches (10.9 cm) of snow, mainly in January and February and rarely December or March, with more frequent ice storms and sleet mixed in with rain; seasonal snowfall has historically ranged from trace amounts as recently as 2011–12 to 22.6 in (57 cm) in 1959–60. These storms can have a major impact on the area, as they often pull tree limbs down on power lines and make driving hazardous.

Culture

Museums



Mint Museum Uptown at Levine Center for the Arts



The Harvey B. Gantt Center for African American Arts + Culture



Bechtler Museum of Modern Art

- Bechtler Museum of Modern Art
- Billy Graham Library
- Carolinas Aviation Museum
- Charlotte-Mecklenburg Fire Education Center and Museum
- Charlotte Nature Museum in Freedom Park

- Charlotte Trolley Museum in Historic South End
- Discovery Place
- Discovery Place KIDS-Huntersville
- Harvey B. Gantt Center for African-American Arts + Culture
- Historic Rosedale Plantation
- Levine Museum of the New South
- The Light Factory
- McColl Center for Visual Art
- Mint Museum
- NASCAR Hall of Fame
- Second Ward Alumni House Museum
- Wells Fargo History Museum
- Charlotte Museum of History

Performing arts

- Actor's Theatre of Charlotte
- Amos' Southend Music Hall
- Blumenthal Performing Arts Center
- Carolina Actors Studio Theatre
- Charlotte Symphony Orchestra
- Charlotte Shakespeare
- Children's Theatre of Charlotte
- ImaginOn
- North Carolina Dance Theater
- North Carolina Music Factory
- Opera Carolina
- The Robot Johnson Show
- Citizens of the Universe
- Theatre Charlotte
- Tremont Music Hall
- Carolina Renaissance Festival

Festivals and special events

The Charlotte region is home to many annual festivals and special events. Carolina Renaissance Festival, operating Saturdays and Sundays, October and November. Located near the intersection of 73 and Poplar Tent Road, the Carolina Renaissance Festival is one of the largest renaissance themed events in the country and features 11-stages of outdoor variety entertainment, a 22-acre village marketplace, an interactive circus, an arts and crafts fair, a jousting tournament and a feast—all rolled into one non-stop, day-long family adventure.

Zoos and aquariums

Charlotte is "... the largest metropolitan area in the United States without a zoo." The Charlotte Zoo initiative is a proposal to allocate 250 acres (101 ha) of natural North Carolina land to be dedicated to the zoological foundation, which was incorporated in 2008. On August 18, 2012, News Channel 14 says that the initiative is "... still a few years away" and the plot of land is "... just seven miles

from the center of uptown." According to the news channel, "... the zoo will cost roughly \$300 million, and will be completely privately-funded." The Charlotte Observer references two other zoos, the Riverbanks Zoo and Garden and the North Carolina Zoological Park as two "great zoos" that are accessible from the Charlotte-Mecklenberg area, both roughly more than 70 miles away.

Charlotte is also served by the Sea Life Charlotte-Concord Aquarium, in the nearby city of Concord. The aquarium is 30,000-square-foot in size, and is part of the Concord Mills mall. The aquarium opened on February 20, 2014.

Education and libraries

School system

The city's public school system, Charlotte-Mecklenburg Schools, is the second largest in North Carolina and 17th largest in the nation. In 2009, it won the NAEP Awards, the Nation's Report Card for urban school systems with top honors among 18 city systems for 4th grade math, 2nd place among 8th graders. An estimated 144,000 students are taught in 164 separate elementary, middle, and high schools.

Colleges and universities



The Student Union Quad of UNC Charlotte's main campus

Charlotte is home to a number of notable universities and colleges such as Central Piedmont Community College, Charlotte School of Law, Johnson C. Smith University, Johnson & Wales University, Queens University of Charlotte, and the University of North Carolina at Charlotte. Several notable colleges are

located in the metropolitan suburbs. In Davidson, Davidson College is ranked in the top 10 nationally among liberal arts colleges according to U.S. News & World Report. Additional colleges in the area include Belmont Abbey College in the suburb of Belmont, North Carolina, and Wingate University in the suburb of Wingate, North Carolina. Also nearby are Winthrop University, Clinton Junior College and York Technical College in Rock Hill, South Carolina.

UNC Charlotte is the city's largest university. It is located in University City, the northeastern portion of Charlotte, which is also home to University Research Park, a 3,200 acres (13 km²) research and corporate park. With more than 27,000 students, UNC Charlotte is the fastest-growing university in the state system and the fourth largest.

Central Piedmont Community College is the largest community college in the Carolinas, with more than 70,000 students each year and 6 campuses throughout the Charlotte-Mecklenburg region. CPCC is part of the statewide North Carolina Community College System.

The Charlotte School of Law opened its doors in Charlotte in 2006 and was fully accredited by the American Bar Association in 2011. The law school offers the Juris Doctor degree and has affiliated programming with UNC Charlotte and Johnson C. Smith University. Charlotte School of Law is the largest law school in the Carolinas.

Pfeiffer University has a satellite campus in Charlotte. Wake Forest University, with its main campus in Winston-Salem, North Carolina, also operates a satellite campus of its Babcock Graduate School of Management in the Uptown area. The Connecticut School of Broadcasting, DeVry University, and ECPI University all have branches in Charlotte. The Universal Technical Institute has the NASCAR Technical Institute in nearby Mooresville, serving the Charlotte area. Montreat College (Charlotte) maintains a School of Professional and Adult Studies in the city.

The North Carolina Research Campus, a 350-acre biotechnology hub located northeast of Charlotte in the city of Kannapolis, is a public-private venture including eight universities, one community college, the David H. Murdock Research Institute (DHMRI), the U.S. Department of Agriculture (USDA) and corporate entities that collaborate to advance the fields of human health, nutrition and agriculture. Partnering educational organizations include UNC Charlotte and Rowan-Cabarrus Community College, from the Charlotte region, as well as Appalachian State University, University of North Carolina at Chapel Hill, Duke University, University of North Carolina at Greensboro, North Carolina A&T State University, North Carolina Central University and North Carolina State University. The research campus is part of a larger effort by leaders in the Charlotte-area to attract energy, health and other knowledge-based industries that contribute to North Carolina's strength in biotechnology.

Libraries



ImaginOn Children's Theater and Library

The Charlotte Mecklenburg Library serves the Charlotte area with a large collection (more than 1.5 million) of books, CDs and DVDs at 15 locations in the city of Charlotte, with branches in the surrounding towns of Matthews, Mint Hill, Huntersville, Cornelius and Davidson. All locations provide free access to Internet-enabled computers and WiFi, and a library card from one location is accepted at all 20 locations.

Although the Library's roots go back to the *Charlotte Literary and Library Association*, founded on January 16, 1891, the state-chartered Carnegie Library which opened on the current North Tryon site of the Main Library was the first non-subscription library opened to members of the public in the city of Charlotte. The philanthropist Andrew Carnegie donated \$25,000 dollars for a library building on the condition that the city of Charlotte donate a site, and \$2500 per year for books and salaries, and that the state grant a charter for the library. All conditions were met, and the Charlotte Carnegie Library opened in an imposing classical building on July 2, 1903.

The 1903 state charter also required a library be opened for the disenfranchised African-American population of Charlotte. This was completed in 1905, with opening of the *Brevard Street Library for Negroes*, an independent library in Brooklyn, a historically black area of Charlotte, on the corner of Brevard and East Second Street (now Martin Luther King Boulevard). The Brevard Street Library was the first library for African Americans in the state of North Carolina, some sources say in the southeast. The library was closed in 1961 when the Brooklyn neighborhood in Second Ward was redeveloped, but its role as a cultural center for African-Americans in Charlotte is continued by the Beatties Ford branch, and the West Boulevard branch of the library system, as well as by Charlotte's African-American Cultural Center.

FEATURED INSTITUTIONS

1. Davidson College

ABOUT DAVIDSON

Davidson College seeks out intellectually curious students who are committed to developing their talents for lives of leadership and service.

Small classes enable our renowned faculty to work closely with students, engaging them directly in original research and creative work across the arts, sciences, social sciences, and humanities. In the classroom and beyond, Davidson cultivates students' compassion, creativity, resilience, and moral courage.

We nurture these values in a community founded on trust as articulated by the Honor Code and on free, unfettered inquiry. The Davidson Trust supports our campus-wide commitments to access and equal opportunity.

Nearly one-quarter of our students compete in Division I athletics, and 80 percent of our students study or work internationally during their Davidson careers. These rich and distinguished offerings enable Davidson graduates to thrive in a global society and exert disproportionate impact for good.

DEAN RUSK INTERNATIONAL STUDIES PROGRAM

Students have the opportunity to choose from more than 10 Davidson faculty-led programs or from nearly 200 study abroad programs that are run by third-party providers around the world.

RESEARCH

Davidson is a recognized leader in undergraduate research and in-depth studies across all academic programs. Students are encouraged to join faculty in extensive and original work.

HISTORY & TRADITIONS

Established in 1837 by Presbyterians of North Carolina, Davidson is a liberal arts college dedicated to cultivating humane instincts and disciplined, creative minds. As a college that welcomes students, faculty, and staff from a variety of nationalities, ethnic groups, and traditions, Davidson values every kind of diversity, recognizing the dignity and worth of every person while providing a range of opportunities for worship, civil debate, and teaching that enrich mind and spirit. Davidson challenges students to engage in service to prepare themselves for lives of growth and giving.

At Davidson, the history of the college energizes campus life through traditions that connect current students with the college's rich heritage.

HONOR CODE SIGNING DAY

Respect for the Honor Code has been a central philosophy to campus life, ensuring academic integrity and providing the foundation for the open environment in which Davidson students live and study. Campus commitment to the Honor Code brings with it special freedoms, ranging from the prevalence of take-home tests to unproctored, self-scheduled exams during every finals period.

The annual ceremony in which incoming students sign the Honor Code remains a distinctive moment in the first-year student experience, connecting them to the college's honor-bound past:

"Davidson frankly avows her belief that Character is more important than Education, that Sincerity, Honor, and Purity are more valuable than Knowledge..." wrote Pres. Henry Louis Smith in the Davidson College Bulletin in October 1904, adding *"...true breadth of culture is found in the harmonious development of body, mind, and moral nature."*

Davidson's 2010 Celebration of Honor and Integrity marked the 100th anniversary of a student-run honor system at the college, and the 50th anniversary of the creation of the student-run Honor Council. Davidson's Honor Code inspires students to graduate with a life-long commitment to integrity, one they carry with them far beyond the classroom and into lives of leadership and learning.

EU & PHI HALLS

Eumenean and Philanthropic Halls, constructed in 1849 and 1850 respectively, comprise part of Davidson's historical campus and are named for the first two student societies founded at the college, both of which still meet today. The Eumenean Society would debate with the Philanthropic Society across the quad, engaging in spirited conversation and intellectual discourse, out of which sprang the foundations for the Honor Code and other long-held Davidson values. Even notable student Woodrow Wilson, the 28th President of the United States and one-time member of the Eumenean Society, likely gave his first speech from the iconic Eu Hall balcony, before he went on to transfer and graduate from Princeton University in 1879.

Today, students keep the tradition alive: over Family Weekend during presidential election years, the Young Democrats and College Republicans debate across balconies about relevant issues, just as Davidson's earliest students did in the 1800s.

CAKE RACE

What once was a mandatory trial-by-fire for the incoming class lives on today as a celebration for first-year students and the Town of Davidson alike.

The Cake Race, established in 1930 by Davidson Coach Pete Whittle, helped him identify hidden track and field talent in the freshman class. Knowing that a mandatory 1.7 mile race around town in the hot Carolina sunshine would be a tall order, even for Davidson students, Coach Whittle came up with a compelling incentive: winners would receive a homemade cake of their own choosing.

The race has since become a Davidson trademark and a (voluntary!) part of the first-year experience, with members of the Davidson community faithfully donating the cakes every year and cheering on the racers.



The Baker-Watt Science Complex at Davidson College, Davidson, NC



Students (Biology Majors) holding friends in the herpetology laboratory in the Baker-Watt Science Complex at Davidson College. Back row from left to right: Barney Beermann, Jaeyoung Lee, and Eli Teague. Front row from left to right: Aren Carpenter, Katie Greene, Brielle Bowerman, Alanna Horton, Eleanor Seaman, Anna Lee Tutterow, and Emma Johnson.

2. Queens University of Charlotte

Get to Know Queens



Nestled in a historic tree-filled neighborhood just minutes from Uptown Charlotte, Queens has provided students with transformational experiences for more than 155 years.

A private, co-ed, masters-level university, Queens serves undergrad and graduate students in academic programs across the liberal arts and sciences as well as the professional fields of business, communication, nursing, health and education. All degree programs are grounded in a liberal arts core to help students hone their critical thinking, problem solving and communication skills.

With a 10:1 student-faculty ratio, the university is known for its student-centered mentality, welcoming southern hospitality and talented and caring faculty. Queens values the factors which foster student success: an intimate learning environment, excellence in teaching and intellectual curiosity.

In keeping with its Presbyterian heritage, responsibility and service to society are also critical parts of Queens' culture, as expressed in its motto "Not to be served, but to serve."

Queens emphasizes active, collaborative learning with a focus on a 21st century global curriculum that takes students beyond the classroom and into the Charlotte community and world at large. With the city of Charlotte as an extended campus, students have the opportunity to launch into abundant internships, community service and academic partnerships. All undergraduate students must complete at least one internship. In addition, the majority of Queens' undergraduates study internationally in hundreds of countries via faculty-led study tours, international internships, language-immersion programs and semester exchange opportunities.

By graduation, students have obtained a comprehensive education grounded in the liberal arts and filled with opportunities to ready them for both successful careers and meaningful lives.

Mission, Vision & Values



Our Mission

Queens University of Charlotte provides transformative educational experiences that nurture intellectual curiosity, promote global understanding, encourage ethical living, and prepare individuals for purposeful and fulfilling lives.

Our Vision

Queens University of Charlotte will be recognized as a leading comprehensive university, distinguished by its commitment to transforming the lives of its students and enhancing the intellectual and cultural fabric of its community.

Our Values

To fulfill its mission and its vision, Queens University of Charlotte acts upon the following values:

Focus on Students: We value the factors which foster student success: an intimate learning environment, excellence in teaching, intellectual curiosity, and an education grounded in the liberal arts tradition, one which develops critical thinking, creativity, communication, commitment to ethical behavior, responsible citizenship and which serves as a foundation for successful and fulfilling lives.

Integrity and Respect: We value a sense of caring and community, seek to promote diversity and respect for all people and we recognize the importance of personal integrity and ethical action.

Stewardship: We value and are committed to those who learn and work at Queens, and we are proud of our university. We will responsibly manage our heritage, our resources and our reputation in the community to ensure that we remain a source of pride for our students, faculty, staff, donors and alumni.

Creativity and Innovation: We value creative and innovative thinking and acting, both in the classroom and in advancing Queens toward its vision as a leading comprehensive university and a community asset.

Service: We value responsibility and service to the society at large, in keeping with our Presbyterian connection and as expressed in our motto, "Not to be served, but to serve."

History of Queens

Queens University of Charlotte is a coeducational, comprehensive university that has served Charlotte and the Southeast for more than 150 years. The university prides itself on a strong foundation including a Presbyterian heritage, outstanding faculty, innovative curricula and creative programs.

Our Name

Founded in 1857 as the Charlotte Female Institute, the college was originally located at the intersection of College Street and 9th Street near the center of the city. From 1891-1896, it was called the Seminary for Girls. In 1896, chartered by Concord and Mecklenburg Presbyteries, the seminary merged with the Presbyterian Female College. In 1912, it became Queens College, and in 1914 the college relocated to its present campus in Myers Park. The name Queens College was adopted for three reasons: at the request of the Alumnae Association to disarm prejudice in deference to other Presbyterian colleges which claimed an equal right to the denominational name; to commemorate Queen's Museum, a classical school established in Charlotte in 1771; and to honor Queen Charlotte of Mecklenburg.

In 1930, Queens College became related to the Presbyterian Synod of South Carolina through a merger with Chicora College in Columbia, SC. The motto from Chicora College, *Non ministrari sed ministrare* - Not to be served, but to serve - was adopted as the motto of Queens College. Over the years, Queens' growing graduate programs led to its reclassification by the Carnegie Foundation as a master's level university and in 2002, Queens College became Queens University of Charlotte.

Becoming Coeducational

In the aftermath of World War II, Queens admitted its first male students in a non-residential status. In addition, a coeducational evening college was established in 1948 to provide instruction for adults. This was the forerunner of the Hayworth College undergraduate program for adult learners, inaugurated in 1979 as New College. In 1987, Queens College became fully coeducational.

Our Schools

In 1993, the McColl School of Business was created to join the original undergraduate program known as the College of Arts and Sciences. The school achieved AACSB Accreditation in 2007, the highest level given to business schools.

In 2004, Queens merged its nursing program with Presbyterian Hospital's program to create its second school, the Presbyterian School of Nursing. In 2007, the Board of Trustees approved the creation of the Cato School of Education. In 2008, the School of Communication (renamed the Knight School of Communication in 2010) was created. Also in 2010, the Andrew Blair College of Health was created to expand the university's offerings in the growing field of healthcare. It houses the Presbyterian School of Nursing.

Graduate Programs

Queens has provided graduate education since 1980 when the inaugural graduate program, the Master of Business Administration, admitted its first class. Throughout the years, other programs have been added:

- 1983 - MA in Education
- 1992 - MA in Teaching
- 1998 - MS in Nursing
- 1999 - MA in Organizational & Strategic Comm. (*Today, this is the MA in Communication*)
- 2001 - MFA in Creative Writing
- 2008 - MS in Organizational Development
- 2009 - MA in Educational Leadership (*This became a fully online program in 2013*)
- 2011 - MS in Executive Coaching
- 2012 - MA in Music Therapy
- 2013 - MA in Interior Design

Grounded in the Liberal Arts

In 1989, the College of Arts and Sciences adopted the innovative Foundations of Liberal Learning program, which is now known as the Core Program in Liberal Arts and is required of all students. The four-course program encourages robust class discussions, helping students develop stronger critical thinking skills, explore ethics and morality, learn to articulate their values and ideas and become responsible global citizens. This shared experience builds community at Queens and alumni often say Core became a key component to their personal development.

International Experience

The International Experience Program, which became the John Belk International Program after a generous gift from the Belk family, was established in 1989. The program allowed rising seniors to participate in three to four-week faculty led study tours in Europe, Asia, Central America and Africa. Today students can choose from a variety of international experiences, from study tours to language immersion programs to international internships to semester and year-long exchange programs.

Internships and Career Development

In 1996, the Internship and Career Development Program began requiring a minimum of six credit hours for all students enrolled in the College of Arts and Sciences. Today it boasts 100 percent participation from the university's student body.

Online Degrees

Beginning in 2013, Queens began offering fully online programs including the MA in Communication; the MS in Nursing with a Clinical Nurse Leader track; the MA in Educational Leadership; and the Master of Business Administration.

Our Future

Queens has provided transformational educational experiences to students from all walks of life for more than a century. We are committed to continuing our tradition of excellence in education while becoming a leading university of the Southeast and the world at large.

The Office of the President

For more than a century, Queens has been transforming students' lives and fostering personal and professional success. The University's strong foundation features a Presbyterian heritage, award-winning faculty, innovative curriculum, and an assortment of creative programs.

Since our founding in 1857, we have grown from an all-women's college into a master's level university. The Queens of today is a thriving co-educational institution, boasting five N.C. Professors of the Year, 18 NCAA Division II men's and women's sports teams (including reigning NCAA Division II Men's and Women's Swimming Team National Champions), and exemplary international study and internship programs that have been named among the best in the country.



President Pamela Davies, Ph.D.

"With the help of many generous alumni and friends, we have garnered significant funding to support our scholarship program and our facilities plan. Recent gifts have bolstered scholarship offerings for high-achieving students and will impact the Queens student experience for years to come. Facility expansion and renovation has also been a focus, and the Queens community has benefitted greatly from new spaces such as the Levine Center for Wellness and Recreation, the Hall Brown Terrace, and the Grigg Outdoor Classroom. Currently underway is a \$6 million renovation of Knight-Crane Hall, which will house the Knight School of Communication and several other campus programs. Plans for a new

tennis center and an expansion of iconic Belk Chapel are also in place. These improvements are helping to ensure the momentum from our first 150 years continues for many generations to come. Our highest priority at Queens is maintaining our tradition of excellence in education and providing transformational experiences that ensure our students' success.

"Enjoy your time learning more about Queens online, but do consider visiting our beautiful campus in person. I believe that you will find that Queens has much to offer and is committed to supporting our students and community as it has for since its founding. I hope to see you on campus sometime soon."

"Go Royals!"



Pamela Davies, Ph.D.

President, Queens University of Charlotte

3. Charlotte Teachers Institute

CTI Mission

The Charlotte Teachers Institute (CTI) is an initiative to strengthen teaching and learning in local public schools. Led by classroom teachers in Charlotte-Mecklenburg Schools (CMS) and professors at UNC Charlotte and Davidson College, CTI is founded on four pillars of strong professional development: content knowledge, creativity, leadership and collaboration.

Since its inception in 2009 as an educational partnership with CMS, Davidson College and UNC Charlotte, CTI has . . .

- Conducted 52 long-term Seminars led by 41 Davidson College and UNC Charlotte professors for more than 350 CMS teachers, totaling over 15,000 hours of professional development.
- Guided CTI Fellows in creating more than 500 original Curriculum Units designed for their own students, available to educators worldwide.
- Presented 20 public events (including CTI's *Exploding Canons* speakers series) at educational and cultural venues in the community, for over 3,000 people, half of whom are CMS teachers.

Charlotte Teachers Institute earned the Council of Great City Schools Urban Impact Award (2013) for partnership and impact on student learning. CTI continues to maximize its strong educational and community alliances to provide engaging, effective, teacher-led, professional development for CMS educators to advance student growth.

History

The Charlotte Teachers Institute is based four pillars: content knowledge linked to pedagogy, creativity, leadership and collaboration. Through seminars led by college and university faculty, teachers learn new content, work collaboratively with other teachers, and develop new curricula for their students and for teachers across the country.

Since 2009, CTI has more than doubled its annual programming from four seminars each year to now conducting eight seminars annually (four led by UNC Charlotte faculty and four led by Davidson College faculty). To date, CTI has conducted more than 12,000 hours of professional development seminars for over 300 CMS teachers who have in turn taught more than 62,600 CMS students in grades K-12. Currently, CTI is open to all classroom teachers in the 164 schools in CMS.

As stated by Ann Clark, Superintendent for CMS, "Simply the opportunity for a teacher to collaborate with a college faculty member with relevant subject area expertise and then publish a curriculum unit is an amazing professional growth stretch for most teachers."

Additionally, CTI has engaged the Charlotte community-at-large in cultural events about issues of diversity and social responsibility. In 2010, CTI started *Exploding Canons* as an intellectual diversity speaker series designed to showcase UNC Charlotte and Davidson College's faculty scholars through interdisciplinary discussions. To date, CTI has hosted 17 public community events which have been attended by more than 3,000 people, half of whom were CMS teachers.

4. University of North Carolina Charlotte

University Mission Statement

UNC Charlotte is North Carolina's urban research university. It leverages its location in the state's largest city to offer internationally competitive programs of research and creative activity, exemplary undergraduate, graduate, and professional programs, and a focused set of community engagement initiatives. UNC Charlotte maintains a particular commitment to addressing the cultural, economic, educational, environmental, health, and social needs of the greater Charlotte region.

University Vision and Values

In fulfilling our mission, we envision a University that promises:

- An accessible and affordable quality education that equips students with intellectual and professional skills, ethical principles, and an international perspective.

- A strong foundation in liberal arts and opportunities for experiential education to enhance students' personal and professional growth.
- A robust intellectual environment that values social and cultural diversity, free expression, collegiality, integrity, and mutual respect.
- A safe, diverse, team-oriented, ethically responsible, and respectful workplace environment that develops the professional capacities of our faculty and staff.

To achieve a leadership position in higher education, we will:

- Rigorously assess our progress toward our institutional, academic, and administrative plans using benchmarks appropriate to the goals articulated by our programs and in our plans.
- Serve as faithful stewards of the public and private resources entrusted to us and provide effective and efficient administrative services that exceed the expectations of our diverse constituencies.
- Create meaningful collaborations among university, business, and community leaders to address issues and opportunities of the region.
- Develop an infrastructure that makes learning accessible to those on campus and in our community and supports the scholarly activities of the faculty.
- Pursue opportunities to enhance personal wellness through artistic, athletic, or recreational activities.
- Operate an attractive, environmentally responsible and sustainable campus integrated with the retail and residential neighborhoods that surround us.

Approved by the Board of Governors on April 11, 2014

University History

UNC Charlotte is one of a generation of universities founded in metropolitan areas of the United States immediately after World War II in response to rising education demands generated by the war and its technology.



To serve returning veterans, North Carolina opened 14 evening college centers in communities across the state. The Charlotte Center opened Sept. 23, 1946, offering evening classes to 278 freshmen and sophomore students in the facilities of Charlotte's Central High School. After three years, the state closed the centers, declaring that on-campus facilities were sufficient to meet the needs of returning veterans and recent high school graduates.

Charlotte's education and business leaders, long aware of the area's unmet needs for higher education, moved to have the Charlotte Center taken over by the city school district and operated as Charlotte College, offering the first two years of college courses. Later the same leaders asked Charlotte voters to approve a two-cent tax to support that college. Charlotte College drew students from the city, Mecklenburg County and from a dozen surrounding counties. The two-cent tax was later extended to all of Mecklenburg County. Ultimately financial support for the college became a responsibility of the State of North Carolina.

As soon as Charlotte College was firmly established, efforts were launched to give it a campus of its own. With the backing of Charlotte business leaders and legislators from Mecklenburg and surrounding counties, land was acquired on the northern fringe of the city and bonds were passed to finance new facilities. In 1961, Charlotte College moved its growing student body into two new buildings on what was to become a 1,000-acre campus 10 miles from downtown Charlotte.



Three years later, the North Carolina legislature approved bills making Charlotte College a four-year, state-supported college. The next year, 1965, the legislature approved bills creating the University of North Carolina at Charlotte, the fourth campus of the statewide university system. In 1969, UNC Charlotte began offering programs leading to master's degrees. In 1992, it was authorized to offer programs leading to doctoral degrees.

Now a research-intensive university, UNC Charlotte is the fourth largest of the 17 institutions within the University of North Carolina system and the largest public institution in the Charlotte region.

The University comprises seven professional colleges and offers a range of degree programs at the doctoral, master's and bachelor's degree levels. More than 1,000 full-time faculty comprise the University's academic departments and the 2015 fall enrollment exceeded 27,950 students. UNC Charlotte boasts more than 120,000 living alumni and adds roughly 5,000 new alumni each year.

Updated October 2015



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PAPER AND POSTER ABSTRACTS

You must attend and present your paper/poster in order to have the abstract published in the July issue of *SEB*. Please visit the ASB website, www.sebiologists.org, for the latest information on papers and posters for the Concord meeting!

The Abstract Deadline is Sunday, February 7, 2016.

ASB 2016 FIELD TRIPS

1) Redlair Preserve, North Carolina Plant Conservation Program

Fee: \$10

Leader: Robert Peet (peet@unc.edu, UNC-CH)

Maximum Participants: 30

Date: Thursday, March 31st

Travel: Car pool. Alternatively, participants coming to ASB from west of Charlotte could meet at the preserve (contact the trip leader).

Depart: Depart Concord Convention Center at 12:00. Assemble at Redlair and start hike at 1:00. Depart Redlair at 4:00. Arrive back at Convention Center by 5.

Information: maps, plant list, etc.: <http://redlair.org>.

Description: The Redlair Plant Conservation Preserve is an area of approximately 750 acres and is part of a larger 1200-acre protected area. The primary reason for creation of the preserve is that it contains the largest population of the regionally rare *Magnolia macrophylla* on the Atlantic slope. In addition, it contains one of the very few healthy populations of the federally endangered *Helianthus schweinitzii* in a natural habitat. The preserve borders a four-mile stretch of the free-flowing South Fork of the Catawba River and has complex topography, many different natural communities in excellent condition and over 450 species of vascular plants.

2) Tour of NC Research Campus

Fee: \$10

Maximum Participants: 15

Date: Thursday, March 31st (2:00-4:00 PM)

Travel: Ample free parking is provided at the research campus and this is just a short drive north of the convention center.

Description: Travel 20 minutes from Embassy Suites for an overview of the NC Research Campus, a public-private research center focused on human health, nutrition and agriculture. Tour the facilities, learn about the research programs and find opportunities to collaborate with scientists from UNC Chapel Hill, NC State, UNC Charlotte, Appalachian State, NC A&T, NC Central, UNC Greensboro and Duke University. You can learn more about the NC Research Campus by visiting www.ncresearchcampus.net.

3) Pee Dee National Wildlife Refuge

Fee: \$10

Leaders: Bruce A. Sorrie, Research Associate UNC-Chapel Hill herbarium (basorrie@gmail.com); Assistant leader J.D. Bricken, Refuge Manager

Maximum Participants: 25

Date: Sunday, April 3rd

Travel: Car pool. We will make several stops by vehicle on the refuge, walking out from each. So, the fewer cars we have the better for all.

Depart: Depart Concord Convention Center at 9:00 am. Assemble at PDNWR headquarters on rte. 52 S of Ansonville, Anson County, at 10:15. After restroom stop, begin driving on refuge at 10:30. Lunch onsite; provide your own food & drink to eat in field. Depart refuge at 2:30; arrive back at Convention Center at 3:45.

Information: maps, etc.: http://www.fws.gov/refuge/pee_dee/

Description: Pee Dee National Wildlife Refuge straddles the Pee Dee River in Anson and Richmond Counties in the lower piedmont of NC. Originally created to protect wintering waterfowl, the refuge has also become noted for its high quality and/or rare plant communities. We will visit the broad floodplain of Brown Creek, a nationally significant example of a bottomland forest. Adjacent to an ancient oxbow, we will search for spring wildflowers on mesic slopes. After lunch, we will spend time in a G1 wet pine flatwoods community that harbors dozens of species of coastal plain origin. It is being restored with periodic controlled burns.

4) Working on the Rocks: Quillworts of the North Carolina Piedmont

Fee: \$5

Leader: Jay Bolin (jfbolin@catawba.edu) and Lytton Musselman (lmusselm@odu.edu)

Maximum Participants: 14

Date: Sunday, April 3rd

Depart: Sunday April 3, 8:30am from the Concord NC Convention Center return by 2:30pm (Van Provided).

Description: This field trip is affiliated with the Quillcon II Symposium but all field biologists are welcome. We will explore the quillwort and plant diversity of the central piedmont of NC, including granite rock outcrop plant communities, forested wetlands, and the Uwharrie mountains. The field trip concludes with a Lexington-Salisbury style Carolina barbecue lunch on the peak of Morrow Mountain (chicken and pork; please bring \$10 cash for the cost of lunch).

5) Uwharrie National Forest

Fee: \$10

Leader: Alan S. Weakley, Director, UNC Herbarium (NCU), NC Botanical Garden, UNC-Chapel Hill (weakley@unc.edu)

Maximum Participants: 30

Date: Sunday, April 3rd

Travel: Car pool. We will make several stops by vehicle on the Forest, walking out from each. So, the fewer cars we have the better for all.

Depart: Depart Concord Convention Center at 9:00 am. Lunch onsite; provide your own food & drink to eat in field. Arrive back at Convention Center at 5:30.

Description: Uwharrie National Forest contains some of the best remnants of well-managed Piedmont biodiversity between New Jersey and Alabama. The Uwharrie Mountains geologically represent an island arc and African terranes welded onto the North American Plate in continental collisions, and encompass a microcosm of modern Piedmont communities, with areas of rugged and subtle topography, a diversity of rock types varying from mafic to felsic, fire-maintained xeric slopes and ridges, mesic slopes, bogs, depression swamps, river corridors, and an admixture of Coastal Plain, montane, and piedmontane floristic elements. We will aim (in a long and busy day) to see Piedmont longleaf pine savannas, steep-slope shortleaf pine and oak woodlands on contrasting felsic and mafic substrates, "Piedmont prairie" endemics, depression swamps with breeding amphibians, rich slopes with spring ephemerals, and scour glades with rare endemic species.

6) Conservation Committee Service Field Trip at Carolina Raptor Center

Fee: None

Maximum Participants: 20

Date: Thursday, March 31st (8:30 AM – 2:00 PM)

Travel: A van will be departing from the Concord Convention Center at 8:30am.

Description: The Conservation Committee is hosting a service field trip for ASB 2016 in Concord, NC. Our idea is to work with the Carolina Raptor Center (<http://www.carolinaraptorcenter.org/>) for a half day and a field trip half day. The field trip attendees would provide volunteer effort to do some basic upkeep around the CRC (fence repair, weeding, removal of invasives, planting natives, etc...), which is critical to their ongoing conservation efforts, as well as be shown the Center behind-the-scenes by CRC staff.

Other Activities

1. Top 10 Local Favorite Places to Visit

For us, this is pretty much heaven.

When you live "Where Racing Lives," it's easy to spend free time fueling a love for motorsports. It's the pulse of our community, and it's a heart-pounding one. Add a little food, drink and family fun to those high-speed past times and you're left with our idea of a good time.

1. Anything at Charlotte Motor Speedway, zMAX Dragway and The Dirt Track

No doubt we love the big shows in May and October. A quick look through the parking lot and you'll spot plenty of North Carolina plates. And when it's not NASCAR race weekend, you'll still find us at a track.

Wearing our shades during the World Finals at The Dirt Track (yes—the races are under the lights!), and earplugs in at the “Bellagio of Drag Strips.” At the superspeedway? Depends on the season. Tuesdays from June to August are reserved for Summer Shootout action, cooler weather means car shows (extravaganzas really), and then the track turns into a winter wonderland you wouldn't believe for Speedway Christmas.

2. Staying in style and under budget at Concord Mills

You might think having the largest shopping and entertainment destination in the Carolinas right in your backyard would be bad for the budget. But designer deals at Concord Mills keep our closets and wallets in great shape. And it's not just about how full the trunk is when we leave. We're taking home memories of that walk through the underwater tunnel at Sea Life and challenging each other to another race at The Speedpark.

3. Union Street in Historic Downtown Concord

Union Street is a great place to be Downtown! Dinner and a show at the Davis are always a great choice. There's bound to be a friendly face at Lil' Robert's, and soon we'll welcome craft beer—Cabarrus-style. We can't wait to share a cold one with you! In the meantime, shop at places that sustain our community. Bring home items we created. Taste recipes that were passed down to us. Tell us where you're from and what brings you here. These are the things that make Union Street a great place be.

4. Getting away without leaving town at Great Wolf Lodge

We're firm believers in the power of travel. But when the annual trip has already passed and we're overdue for a little down time, staycation it is! Waterpark, spas, arcade, bowling and great dining under one roof. A few days in 84 degrees is like medicine when the North Carolina winter moves in. Goggles, anyone?

5. Anytime music and motorsports collide

The Avett's are admittedly our favorite when it comes to tunes. Outside of listening to their latest record on repeat, we get our fill of harmony and horsepower at the North Carolina Music Hall of Fame. Carolina-based artists like Charlie Daniels, Eric Church and Roberta Flack are honored right beside racing greats at the Curb Museum.

Want to add a little art to the mix? Sam Bass Gallery is the spot! The inspiring NASCAR art that's appeared on Charlotte Motor Speedway's program covers for over 30 years adorns walls, diecasts and even guitars.

6. Cheering on the home team at Intimidators Stadium

Whether it's "Thirsty Thursday" or a Friday night fireworks show, you can bet on the local crowd being there to support the home team. There are a few characters you need to know about when going to a ball game in Kannapolis. Take a photo with Tim E Gator, and catch foul balls with the "Uh-Huh Guy." And if you've checked off #5, you already know that NASCAR artist Sam Bass designed the team's "K" logo.

7. Panning season at Reed Gold Mine

Did you hear Cabarrus County is the home of gold, too? From April to October each year, we make believe we're Conrad Reed, cross our fingers and sift through silt from Little Meadow Creek searching for a fleck. Even when there's no jackpot, touring the underground mine at the site of America's first discovery of gold is pretty rich.

8. Disc golf at Frank Liske Park

Irresistible Carolina blue skies are just part of the reason Frank Liske Park stays on our agenda. Visitors aren't the only ones competing on the variety of fields here—Local tournaments on the 18-hole disc golf course require a strong arm. Then, legs do all the work during a paddleboat ride afterwards.

9. Saturday night short track action at Concord Speedway

Move over mini-van. Make room for the race car hauler! Flatbed or enclosed, trailers in Cabarrus County are often en-route to the next short track event in town. Racing is a family sport. Hands covered in grease or glitter—Everyone plays their part, and the signs in stands are just as important to supporting our driver as the adjustments made in the garage at home. Hit the concessions and grab a seat! The next generation of NASCAR drivers are about to put on one heck of a show.

10. Embracing hometown pride on The Dale Trail

One of the coolest things we do here in Cabarrus County is share something in common with the Earnhardt family—a love for the city of Kannapolis. It's a place where you'll find a photo of the Intimidator hanging on the wall of a local diner, and you won't travel far without spotting that slanted 3 proudly displayed on hats, flags, mailboxes—you name it.

The Dale Trail takes us to a lot of special spots (20, in fact) including Hendrick Motorsports. OK, go ahead and make it 11 of our favorites—NASCAR race shops are at the heart of what makes this list possible.

2. Top 10 Local Favorite Places to Eat

Add a pinch of Cabarrus County flavor to your plate!

That restaurant you're so fond of from back home may be located here, too. But why not eat where the locals do? From best-kept secrets to happening local hotspots, here's a list of places we hear are worth straying for.

1. Carm's Café

Cozy café serving made-to-order southern breakfast, artisan sandwiches, homemade baked goods and locally roasted S&D Coffee. Grab a seat in the window and gaze out onto Union Street in Historic Downtown Concord while you enjoy wholesome home cooking.

2. E Noodles Asian Bistro

Contemporary and casual, the menu at E Noodles is full of influences from Asia. Enjoy delicious classics like fried rice and Pad Thai to steamy, traditional Vietnamese Pho and fresh sushi creations paired with the perfect martini.

3. Gianni's Trattoria

International flavor from a locally-owned hidden gem. Stop by this neighborhood Italian restaurant for authentic European Italian cuisine like Pappardelle Etuscana. For a more casual meal, head upstairs to the Pizza Loft for a hand-tossed slice.

4. Jim 'N Nick's Bar-B-Q

When they moved to town in 2012, Jim 'N Nick's quickly won over the CabCo community with their cheese biscuits, smoked-to-perfection plates and southern hospitality. This freezer-less barbecue joint topped FOX News list of best barbecue chains in America (March 2014), made Southern Living's Reader's Pick list for best pork sandwich (June 2013), and was awarded Restaurant of the Year at the 2013 Golden Helmet Awards.

5. The Smoke Pit

Open since December 2014, the line extends out the door as their customer base has exploded from 30 to 700 people per day. Sourced from the butcher shop next door, prime cuts are smoked and served with essential southern sides like deviled egg potato salad.

6. The Speedway Club

The ultimate fan and guest experience at Charlotte Motor Speedway where food and service match the location overlooking The Greatest Place to See the Race. Dine as a guest or have lunch with your "Over the Wall" tour for a birds-eye-view of the track.

7. Forty Six

Named for the number of chromosomes in the human body, this elegant restaurant is inspired by the neighboring North Carolina Research Campus. Quotes from famous luminaries adorn the dining room that's warmed by the open kitchen where the culinary team creates healthful dishes made with local produce and fresh ingredients.

8. Rocky River Grille

This stunning restaurant in the Embassy Suites offers casual yet elegant dining. New world tastes meet classic American cuisine in a charged atmosphere with hip comfort. The restaurant and lounge overlook the scenic Rocky River Golf Club.

9. Rosario's Pizza

Friends Giovanni and Roberto bring you 20 years of experience, New York style pizza, calzones, Stromboli, pastas, heroes and Gino's Italian Ice.


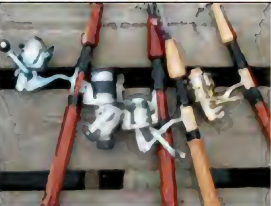

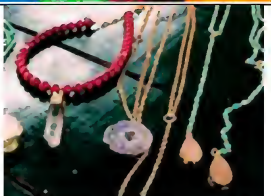
10. R&R Bar-B-Que







Become part of the Great North Carolina BBQ debate! Owners Bob and Rob share a name and a love for true Eastern NC vinegar-based pork BBQ that has led the railroad-themed restaurant to success since 1998. Their must-try menu item? Fried corn on the cob.

3. Cabarrus County Shopping

Everyone has a race to run...

Power shopping is considered a sport in Cabarrus. Choose your pit stop! From [Concord Mills Mall](#) and [Carolina Mall](#), to the main street shops in our Historic Downtown districts, there's something for everyone when it comes to shopping in Cabarrus County.

| | |
|---|--|
|  | <p>3 Jem's Boutique</p> <ul style="list-style-type: none"> ○ 704-787-8027 ○ 791 Davidson Dr., Concord, NC 28025 ○ Visit Website Map Location |
|  | <p>Academy Sports + Outdoors - Concord</p> <ul style="list-style-type: none"> ○ 704-808-4160 ○ 8675 Concord Mills Blvd, Concord, NC 28027 ○ Visit Website Map Location |
|  | <p>Academy Sports + Outdoors - Kannapolis</p> <ul style="list-style-type: none"> ○ 888-922-2336 ○ 2211 Elder Ln, Kannapolis, NC 28083 ○ Visit Website Map Location |
|  | <p>Adair Style Studio</p> <ul style="list-style-type: none"> ○ 704-201-0124 ○ 891 Central Dr., Concord, NC 28027 ○ Visit Website Map Location |

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|---|---|
|  | <p><u>Afton Village Shops</u></p> <ul style="list-style-type: none"> ○ 704-721-5337 ○ 5389 Village Dr., Concord, NC 28027 ○ Visit Website Map Location |
|  | <p><u>Angela's Gift Boutique</u></p> <ul style="list-style-type: none"> ○ 704-788-9076 ○ 14 Union Street, South, Concord, NC 28025 ○ Visit Website Map Location |
|  | <p><u>Audrey's Once Upon a Time Children's Boutique</u></p> <ul style="list-style-type: none"> ○ 704-723-4099 ○ 12 Union Street South, Concord, NC 28025 ○ Map Location |
|  | <p><u>Back Home</u></p> <ul style="list-style-type: none"> ○ 704-209-3318 ○ 1035 Back Street, Gold Hill, NC 28071 ○ Visit Website Map Location |
|  | <p><u>Bass Pro Shops Outdoor World</u></p> <ul style="list-style-type: none"> ○ 704-979-2200 ○ 8181 Concord Mills Blvd., Concord, NC 28027 ○ Visit Website Map Location |
|  | <p><u>Baucom's Shoe Store Inc.</u></p> <ul style="list-style-type: none"> ○ 704-782-6122 ○ 40 Union Street South, Concord, NC 28025 ○ Map Location |

Associated Microscope Inc.

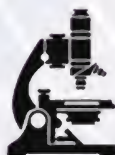
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ASB 2016 SYMPOSIA

- **Southeastern Symposium on Zebrafish Development and Genetics (Friday, 1 April).** In the last 20-25 years, zebrafish has emerged as a major model system to address questions related to Developmental, Cell, and Molecular Biology. Opportunities for zebrafish researchers to meet regionally have become few and far between, however. This symposium is an opportunity for zebrafish scientists from the southeast to meet, share ideas, and form potential collaborations. The symposium will have opportunities for PIs and advanced graduate students to give oral presentations and will also feature a poster session.
- **Collaborations, information technologies, and educational tools to build a regional research engine: an update on the SERNEC herbarium effort (Friday, 1 April).**
- **Ecology and Evolution of Quillworts (*Isoetes*) in the American South – QuillCon II (Saturday, 2 April).** The Southeastern United States is a center of quillwort diversity with the number of recorded species doubling in the past decade or so—and new taxa being found each year. So it is appropriate that the Second Quillwort Conference should be held in conjunction with the annual meeting of the Association of Southeastern Biologists and the Southern Appalachian Botanical Society at the 2016 meeting 31 March-3 April in Concord, North Carolina.

The first conference, dubbed QuillCon I, was held in Douglas, Georgia in 2000 and since that time research has expanded in terms of extensive molecular studies and field collections and also by an increase in the number of researchers, both in the lab and in the field. QuillCon II will consist of invited papers on 1 April with a keynote talk by W Carl Taylor, senior author of the treatment of *Isoetes* for Flora North America. Other speakers include researchers from the Smithsonian Institution, Italy, Canada, and Southeastern institutions. Ample time is allocated for discussions.

Major fieldwork in the American South the past three decades has revealed surprising diversity within this poorly studied genus. New species and hybrids have been described, other taxa have been recently discovered but not named, and numerous other collections are being studied to determine their taxonomic status. Concurrent with fieldwork have been phylogenetic studies suggesting that the genus is more diverse than expected and that resolution of polyphyly is sorely needed. While quillworts appear to have a classic pattern of reticulate evolution, we have little idea what selective factors might drive their evolution. The purpose of the symposium, therefore, is to bring together quillwort researchers to discuss lab and field findings and to collaborate on further research.

All day Saturday 2 April will be devoted to presentations and discussions with a field trip on Sunday 3 April to some of the fascinating granite outcrops in the region lead by regional isoetologist Jay Bolin of Catawba College. Warning! There is a likelihood of new species on these rocks.

For further information contact Jay F Bolin at jfbolin@catawba.edu or Lytton John Musselman at lmusselm@odu.edu.

- **Connecting university scholars and classroom teachers for innovative STEM education – CTI Symposium (Saturday, 2 April).** A.H. Ringwood¹, C. Wood², C. Woolery³, J. Raybon⁴, J. Thompson⁵, R. Solh⁶
¹University of North Carolina – Charlotte; ²East Mecklenburg High School; ³Elizabeth Traditional Elementary; ⁴Myers Park High School; ⁵Coulwood Middle School; ⁶Southwest Middle School

Charlotte Teachers Institute (CTI) is an innovative partnership between CMS (Charlotte-Mecklenburg Schools), Davidson College, and the University of North Carolina at Charlotte (UNC Charlotte). CMS teachers (e.g. CTI Fellows) are engaged in intensive content-rich seminars led by faculty (e.g. Seminar Leaders) to learn new information, work collaboratively with other district teachers, and develop original curriculum units for their classrooms. In this symposium, Teacher Fellows will discuss their experiences, present examples from their units, and provide insights regarding classroom implementation. Fellows from a range of disciplines (biology, earth science, and math) from seminars focused on Metamorphosis and the Intersection of Science, Technology, and Culture will present their work. The success of this program is facilitated by the emphasis on Teacher Leadership and engagement in collaborative and creative venues.

ASB 2016 WORKSHOPS

- **Georeferencing of biological collections data (Thursday, 31 March, 8:30 AM – 5:00 PM).** This workshop will provide an overview of georeferencing concepts, best practices and workflows using the GEOLocate platform in relation to the SERNEC herbarium digitization and georeferencing effort. Specific topics covered will include a brief overview of georeferencing, using the GEOLocate platform for single record, batch processing and collaborative georeferencing, Symbiota integration, upcoming developments, and logistics and workflows specific to georeferencing SERNEC data. The GEOLocate software platform is being used by zoologists and botanists and this workshop will be open to anyone interested in biodiversity informatics.
- **Creating a visual key – A case study in visual learning (Saturday, 2 April, 8:00 AM – Noon).** Although illustrations have played an important role in identification keys and guides since the 18th century, their use has varied widely. Some keys lack all illustrations, while others are heavily

illustrated. Even within illustrated keys the way in which images are used varies considerably. During this workshop we will review some best practices for image use in keys, and create a completely visual key. By a visual key I mean a key based almost exclusively on images, and that contains a minimal amount of text. These types of keys have been made possible by advances in digital imaging, which has allowed the rapid collection of standardized photographs of plants. Characters in visual keys are visually, not verbally defined. During the workshop participants will learn how to create visual keys, and will create a visual key to a group of taxa. Participants will receive the full set of images from the workshop so that they can recreate the exercise in their class. The exercise is suitable for use, with modification, from introductory biology to graduate level classes in plant taxonomy. This will be a hands-on workshop in which everyone can participate. **This event will be capped at 24 attendees.**

- **ASB Education Committee lunch workshop (Saturday, 2 April, Noon – 1:30 PM).** The Education Committee luncheon will focus on a collaborative effort between ASB scientists and high school teachers to deliver specific curriculum topics to high school students. Scientists trained in a specific discipline can use video conferencing equipment to speak to the high school student when a particular topic is covered. The luncheon will cover what equipment will be needed and how to use it. We will also cover how to volunteer as a scientist, and how high school teachers can contact those scientists. Anyone interested in this program or to be a part of the Education Committee may attend.

SILENT AUCTION

ASB will again hold a silent auction next to the exhibitors. All of the proceeds will go towards supporting student travel to the annual meeting. Come look at the items up for bid and help support our presenting students.

SOCIAL EVENTS

Thursday Night Mixer

Immediately following the Plenary Session, there will be a social mixer with LIGHT hors d'oeuvres, a cash bar, and live music. The mixer is a long tradition at ASB meetings and is a great time to renew old acquaintances and make new ones. Be sure to sign up for this event on the registration form. To be held at the Embassy Suites. You must have a ticket to attend.

Friday Night Social

Friday evening begins with a barbeque dinner at Discovery Place, and then transitions to an evening of music and festivities. More details in the April, 2016 issue of *SEB*.

Saturday Night Awards Banquet

The culmination of the annual meeting is the ASB Awards Banquet, where we honor the accomplishments of attendees. Delicious beef, chicken and vegetarian options are available. Following dinner, awards will be presented. Remember that long speeches are no longer a part of the banquet. (A reminder: those competing for ASB awards must register for and be present at the banquet in order to receive the award.)

CONFERENCE BADGES

You will receive your meeting badges when you arrive in Concord. Simply proceed to the Registration Area at the Embassy Suites to receive your badge. **YOU MUST WEAR YOUR BADGE TO ALL FUNCTIONS, INCLUDING SOCIAL EVENTS!**

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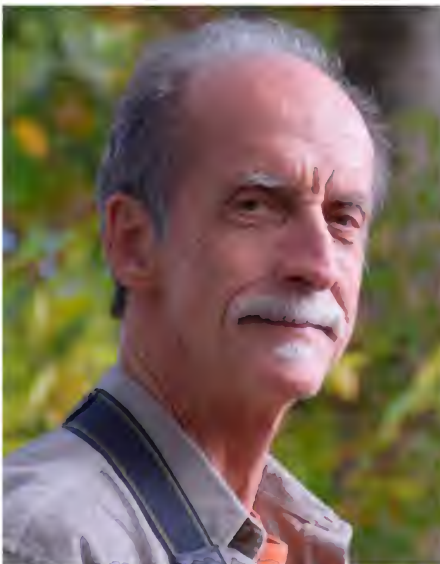
Dr. Reed Noss

Professor and Pegasus Professor
University of Central Florida, Orlando, Florida

Research Area(s): Conservation planning, vertebrate ecology, vegetation science, disturbance ecology, climate change, adaptive management.

BACKGROUND

Reed Noss is Provost's Distinguished Research Professor, Pegasus Professor, and Davis-Shine Professor of Conservation Biology at the University of Central Florida and President of the Florida Institute for Conservation Science. He has a B.S. in Education from the University of Dayton, an M.S. in Ecology from the University of Tennessee, and a Ph.D. in Wildlife Ecology from the University of Florida. He has served as Editor-in-Chief of Conservation Biology (1993-1997), President of the Society for Conservation Biology (1999-2001), and President of the North American Section of the Society (2006-2008). He is an elected Fellow of the American Association for the Advancement of Science and has served on many boards and advisory panels, including the Board of Governors of the Society for Conservation Biology, the Board of Trustees of the Florida Chapter of The Nature Conservancy, and Florida's Acquisition and Restoration Council. He recently served as Vice-Chair of a Federal Advisory Committee for the U.S. Climate Change Science Program.



Professor Noss has more than 300 publications and is recognized as one of the 500 most highly cited authors in all fields worldwide. He has published seven books, the most recent being *Forgotten Grasslands of the South: Natural History and Conservation* (2013, Island Press). He is currently writing books on the fire ecology of Florida and the lower Southeastern Coastal Plain (University Press of Florida) and on natural disturbance as a primary factor that structures ecosystems (Island Press).

Reprinted from the UCF Biology website with the permission of Reed Noss.



ASB 2016 REGISTRATION INFORMATION

**Concord, NC
March 31 – April 3, 2016**

Embassy Suites Charlotte/Concord Golf Resort & Spa
5400 John Q. Hammons Drive. NW, Concord, NC 28027; (704) 455-8200

Please complete the registration form whether paying by credit card *or* check. Early registration ends March 14 at 5pm. On site rates apply after March 14 at 5pm.

Please note: the events section of this registration has multiple parts. Please scroll through the entire page and make all selections prior to continuing through to payment.

Meeting Registration Cost

ASB Student Member (Early/On Site) - \$136/\$186
Student Non-Member (Early/On Site) - \$186/\$236

ASB Professional Member (Early/On Site) - \$265/\$330
Professional Non-Member (Early/On Site) - \$330/\$395

ASB Emeritus Member (Early/On Site) - \$136/\$186
ASB Patron Member (Included with Patron Membership) - \$0
ASB Exhibitor (Included with Exhibitor Fees) - \$0

Ticketed Events

Opening Plenary Reception - \$5
Friday Night Social at Discovery Place - \$40
Saturday Night Awards Banquet - \$40

Note: To register for the meeting as an ASB Member and receive the discounted registration rate, your membership dues must be up-to-date. You can join, rejoin,

and check your current membership status at the following link:
<http://goo.gl/dSEJHI>.

Membership Categories

Regular Annual Membership - \$50

Regular Annual Membership with *Southeastern Naturalist* subscription – \$70
(save \$35 on SENA)

Student Annual Membership - \$20

Student Annual Membership with *Southeastern Naturalist* subscription - \$40
(save \$20 on SENA)

Emeritus Annual Membership - \$20

Emeritus Annual Membership with *Southeastern Naturalist* subscription - \$40
(save \$35 on SENA)

Patron Annual Membership - \$1,000

Patron membership is for individuals who choose to support the society beyond annual meeting registration costs. Patron membership includes a one-year membership, one annual meeting registration, and two tickets to each of the three evening events at the annual meeting (the Plenary Reception, the Social, and the Awards Banquet). ASB Patron Members choosing to receive SENA must pay \$20 per year for SENA subscription, which is a \$35 per year discount over non-ASB member subscription rates.

Lifetime Membership (one-time payment) - \$500

ASB Life Members choosing to receive SENA must pay \$32 per year for SENA subscription which is a \$23 per year discount over non-ASB member subscription rates.

Hotel Reservations

Click the appropriate link below to make your hotel reservations. **Room block expires February 29, Book your room today.**

Non-Students/Standard Block:

<http://embassysuites.hilton.com/en/es/groups/personalized/C/CLTCCES-ASB-20160329/index.jhtml?WT.mc.id=POG>

Student Block:

<http://embassysuites.hilton.com/en/es/groups/personalized/C/CLTCCES-BST-20160331/index.jhtml?WT.mc.id=POG>

If paying by check, please mail a copy of your registration confirmation and payment to: 2016 ASB Conference, Office of Conference & Camp Services, ASU Box 32042, Appalachian State University, Boone, NC 28608-2042.

Group Registrations

This online registration form is designed to process a single registration and payment. To register and pay for multiple attendees with a single credit card transaction or check payment;

1. Complete a registration form for each member of your group.
2. At the end of each registration, choose "pay by check" and close your browser.
3. Re-launch the registration website and enter information for the next attendee.
4. When finished, send the names and affiliation of those you registered, as well as your preferred payment method, to Jenny Moltz (moltzjm@appstate.edu). She will be in touch to assist you in making a single credit card payment or make a note in the system to expect a check for your group. Checks should be mailed to the address above along with a copy of each registration confirmation.

For Registration Information and Questions: Jenny Moltz 828-262-8718 or moltzjm@appstate.edu or Debbie Langley at 828-262-2902 or langleydc@appstate.edu.

HOTEL INFORMATION

Association of Southeastern Biologist – Prof. Member Room Block

Welcome to the Association of Southeast Biologist reservation site! A block of rooms have been reserved for March 29, 2016 – April 3, 2016. The special room rate will be available until February 29th or until the group block is sold-out, whichever comes first.

Booking a reservation from our site is simple. To begin the process, click on “Book a Room” on ASB website to receive your group’s preferred rate.

See you at the Embassy Suites Charlotte – Concord/Golf Resort & Spa in March! We hope you enjoy your stay and your group’s event!

Quick and Easy Reservations for Attendees

Attending an event at our hotel? Special room rates have been arranged for this event. Click on the room type below to view room details.

Special Room Rates

2 DOUBLE BEDS NONSMOKING - rates from \$142.00 USD/Night

1 KING BED NONSMOKING - rates from \$142.00 USD/Night

Check-in Date: 29 March 2016 – 03 April 2016; **Book by February 29th** to reserve your room!

Association of Southeastern Biologist – Student Room Block

Welcome to the Association of Southeast Biologist – Student Room Block reservation site! A block of rooms have been reserved for March 29, 2016 – April 3, 2016. The special room rate will be available until February 29th or until the group block is sold-out, whichever comes first.

Booking a reservation from our site is simple. To begin the process, click on “Book a Room” on ASB website to receive your group’s preferred rate.

See you at the Embassy Suites Charlotte – Concord/Golf Resort & Spa in March! We hope you enjoy your stay and your group’s event!

Quick and Easy Reservations for Attendees

Attending an event at our hotel? Special room rates have been arranged for this event. Click on the room type below to view room details.

Special Room Rates

2 DOUBLE BEDS NONSMOKING - rates from \$122.00 USD/Night

1 KING BED NONSMOKING - rates from \$142.00 USD/Night

Check-in Date: 29 March 2016 – 03 April 2016; **Book by February 29th** to reserve your room!

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The silent auction was a huge success the past two years in Spartanburg and Chattanooga. With YOUR HELP, we raised over \$8,500 for the Student Travel Fund in the past two years. This fund was established in 2006 to help defer travel cost for Graduate Student members presenting papers or posters during the ASB Annual Meeting. Since the fund was created, many students have benefited from these travel grants.

In order to surpass the amount we raised in Spartanburg and Chattanooga, we need Your Help again this year in Concord, NC, the site of the Annual ASB Meeting, March 31-April 3, 2016. The donated items can be books, to handcrafts, to memorabilia, to nature photography, to t-shirts or anything else you think appropriate. Some examples of the recent bestselling items are gift baskets, gift cards, nature books, jewelry, wine or any adult beverage and unique gifts.

- If you have an item you would like to donate to the Silent Auction, please contact Patricia Cox at pcox@utk.edu so we can add your item to our list.
- If you are unable to attend, please mail (via US Postal Service) your item to Patricia B. Cox before Friday March 25th at:

**Patricia B. Cox
3601 Garden Dr.
Knoxville, TN 37918**

- If you are attending the meeting, please bring your item to the Silent Auction Area in the Exhibit Hall before 10:00 AM on Friday, April 1 and one of the committee members will be available to receive it.

We want to thank you in advance for participating in this worthwhile event. If you have any questions, please feel free to contact one of the Committee Members below:

Patricia Cox -- pcox@utk.edu
 Kim Marie Tolson -- tolson@ulm.edu
 Pat Parr -- pdptn@aol.com
 Eloise Carter -- ecarter@learnlink.emory.edu
 Bonnie Kelley -- bonnie.kelley@uncp.edu
 Diane Nelson -- janddnelson@yahoo.com



Silent Auction

____ Yes, I would like to contribute to the Silent Auction to help with student travel to the Annual Meeting.
(100% of all proceeds to benefit student travel).

Examples of Previous Submitted Items

Dissection Set
Corporate Gift Certificates
Frog Model
Dinner for Two
Two Nights Hotel Accommodations
Books
Charts
Wine Gift Basket
Educational Charts
Microscope
Books

Description of item(s) to be donated:

Please check appropriate option:

____ Please contact me at the convention to pick up donation.
____ I will mail donation to Patricia B. Cox, 3601 Garden Drive, Knoxville, TN 37918; 865-632-3609; pcox@utk.edu.

| | | |
|-----------|--------|-------|
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Concord 2016 – Meet our Exhibitors

The Association of Southeastern Biologists (ASB) is excited to have the following great Exhibitors joining us in Concord in 2016! Please take time to visit them and thank them for their continuing support. Check back later for more Exhibitors and details regarding events in the Exhibit Hall. **Please note: Exhibitors are listed below by booth number.**

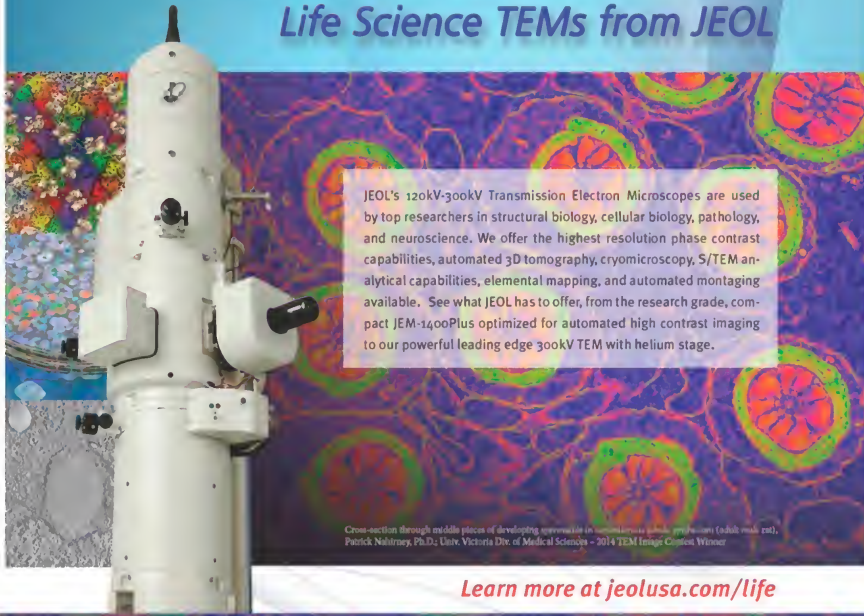
- **Electron Microscopy Sciences** – Electron microscopy sciences will have on display their complete line of accessories, chemicals, equipment for all fields of microscopy, biological research and general laboratory requirements. **(Booth 1)**
- **Discover Life in America** –Discover Life in America's mission is to discover and understand America's species through science and education for conservation. **(Booth 2)**
- **Highlands BioMed, LLC** – Highlands BioMed, LLC specializes in sanitation and disinfection equipment for vivaria, laboratories and hospitals. Our product lines include lab washers, autoclaves and bedding management systems. **(Booth 3)**
- **Associated Microscope** – Sales & service of microscopes- service all brands- sell Leica Microsystems, National & Swift Optical, Accu-Scope, Unitron, LaboMed & Meiji Microscopes as well as Ohaus Balances. We are also school trained to service Spectrophotometers. **(Booths 4 & 5)**
- **Medical Equipment Services** – Bio-Medical equipment service & repair in labs & research facilities, installation, certification, removal / disposal, preventative maintenance, calibration, and asset management. **(Booth 6)**
- **eScience Labs** – eScience Labs collaborates with hundreds of higher education institutions to provide hands-on laboratory kits to students engaged in online and blended learning. **(Booth 7)**
- **Southern Appalachian Botanical Society** – Our mission is to promote the study of botany in eastern North America. **(Booth 8)**
- **University of North Carolina Greensboro, Biology Department** -MS and PhD programs in the UNCG Department of Biology. **(Booth 9)**
- **iDigBio** – iDigBio is the national resource for digitized information about vouchered natural history collections and promotes the uses of biodiversity collections data for research and education. **(Booth 10)**
- **Conviron** – Conviron is a global supplier of controlled environment systems offering an extensive product portfolio including single and

multi-tier chambers and rooms, research greenhouses, and related services. **(Booth 11)**

- **Martin Microscope Company** – Celebrating 70 years of serving the Southeastern US! Microscopes and digital imaging systems for education, laboratory, and research. **(Booth 12)**
- **ASB 2017 – Montgomery, Alabama (Booth 13)**
- **Association of Southeastern Biologists** – Promoting biology through research and education for more than 75 years. **(Booths 20 & 21)**
- **Carolina Biological Supply** – Carolina is a worldwide leader in providing K–16 educators with top-quality, innovative science and math materials, including our newest e-learning tools available at Carolinascienceonline.com. **(Booth 14)**
- **Vashaw Scientific, Inc.** – Vashaw Scientific, Inc. is a full service microscopy, imaging, and material sample preparation provider servicing the Southeast since 1978. We offer a broad portfolio of manufacturers, which uniquely qualifies Vashaw to solve your requirements with the appropriate solutions. **(Booth 15)**
- **National Association of Biology Teachers** – As the “leader in life science education” NABT is dedicated to empowering educators to provide the best biology and life science education for all students. **(Booth 16)**
- **University of Tennessee Press** – UT Press is a publisher affiliated with the University of Tennessee. **(Booth 19)**

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Ric Lensophase Epitaxial 15, Wei Chiu, Ph.D.,
Baylor College of Medicine (top image)
Rabbit Retinal Conus, cone volume: Robert Mann, Ph.D.,
Man, Lab. Moran Eye Center, Univ. of Utah (middle image)
Neuron, 200nm, tomography: Greg Ning, Ph.D.,
Penn State University College of Agricultural Sciences
(bottom image)



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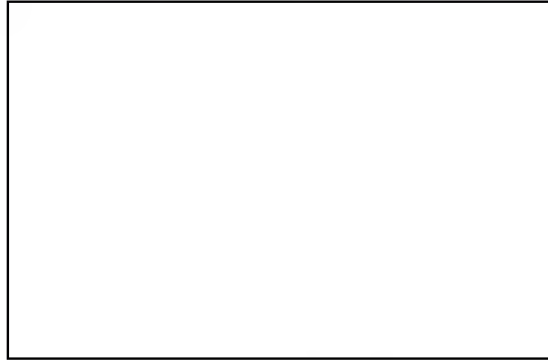
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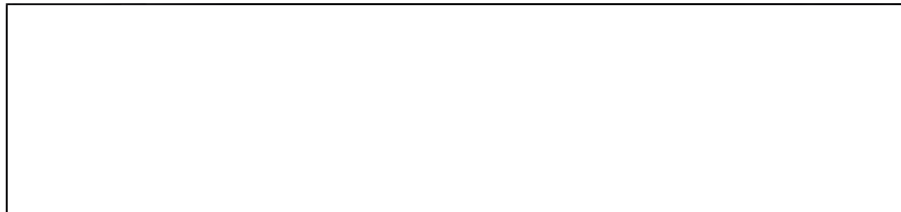
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Full Page 8" (↓) X 5"

Request for Advertising with the Association of Southeastern Biologists (cont.)


_____ Yes, I would like an AD in all 4 (Full Color)
4 issues of Southeastern Biology, (circle choice)

½ page = \$250, full page = \$500

_____ AD in Final On-Site Program (circle choice) (Black & White Only)

½ page = \$250, full page = \$500

*All must be submitted in pdf.

Return Form to Ashley B. Morris, Department of Biology, Middle Tennessee State University, 1301 East Main Street, Murfreesboro, TN 37132, amorris.mtsu@gmail.com. 

Industry Partners Form

2016 Association of Southeastern Biologists
March 31-April 3, 2016, Concord, North Carolina

 Yes I Would Like to Partner with ASB and Participate
In the Industry Partners Program!!


Send no money now, please complete form and return to address shown below

Company/Organization _____
(Please list company name as you wish it to appear on printed materials)
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Address: _____
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Telephone: _____ Fax: _____

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| Qty | Item | Amount |
|--|---|-------------------------|
| _____ | Thurs. Night Cash Bar (4 Opportunities) | \$500/opportunity |
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| _____ | Saturday Night Banquet Cash Bar | \$850 |
| _____ | Yes, I wish to present a workshop | See Workshop Form |
| _____ | 24-Hour Exhibit Hall Security | \$1,000 |
| _____ | ASB Executive Committee Breakfast | \$350 |
| _____ | Yes, I would like to Donate an Item to the | See Silent Auction Form |
| Silent Auction to help with Student Travel | | |
| _____ | ASB Web Site Hot Link to | |
| _____ | Your Company (12 months) | \$375 |
| _____ | Yes, I would like an AD in all 4 | See Advertising Form |
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| | ¼ page=\$200, ½ page=\$325, full page=\$425 | |
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Signature _____ Date _____
Title _____ e-mail _____

Return Form by **January 1, 2016** to Joey Shaw, Dept. of Biological and Environmental Sciences, University of Tennessee, Chattanooga, TN 37403; (423) 425-4344; joey-shaw@utc.edu 

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daw1@ra.msstate.edu

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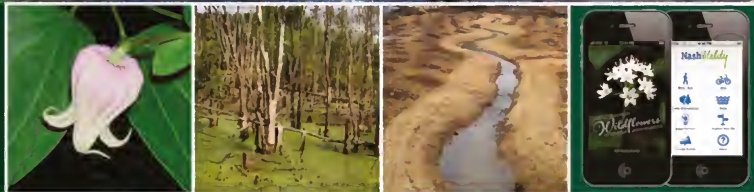
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Affiliate Organizations

Meeting with ASB in 2016

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Southeastern District I**

Dr. Lee Sutton
Department of Biology
S119 Howell Science Complex
East Carolina University
Greenville, North Carolina 27858
Phone: 252-328-5745;
Fax: 252-328-4178
Email: suttonle@ecu.edu

**Beta Beta Beta (β β β)
Southeastern District II**

Dr. Christi Magrath
Dept. of Biological & Environmental
Science
Troy University
Troy, AL 36082
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**Southern Appalachian Botanical
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BEQUESTS TO THE ASSOCIATION OF SOUTHEASTERN BIOLOGISTS

If you would like to help assure ASB's future through a provision in your will, this general form of bequest is suggested:

I give, devise and bequeath to the Association of Southeastern Biologists, business office located in Bridgewater, VA, the sum of \$_____ and/or (specifically described property).

If property, please describe.

We welcome any inquiries you may have. In cases in which you have specific wishes about the disposition of your bequest, we suggest you discuss such provisions with your attorney.

SPECIAL REMINDERS FROM THE JOURNAL EDITOR

ASB BANQUET ATTENDANCE

Please keep in mind that recipients of ASB awards must be present at the annual ASB banquet to receive the award. Therefore, all applicants for ASB awards must attend the banquet to insure the presence of the winners.

MEMBERSHIP AND REGISTRATION UPDATE

All applicants for ASB research awards must be ASB members in good standing, and be duly registered for the annual meeting. If necessary, check with the Treasurer for verification before you apply.

Please make sure your membership status is up-to-date amply before the deadline for abstract submission and for annual meeting registration. Please be aware that mailing a check or money order for membership renewal to the treasurer and then trying to register online or by mail for the annual meeting on the same day does not work. Moreover, trying to pay for membership renewal online in tandem with registering for the annual meeting online does not work well either.

EXTRA ABSTRACT SUBMISSION

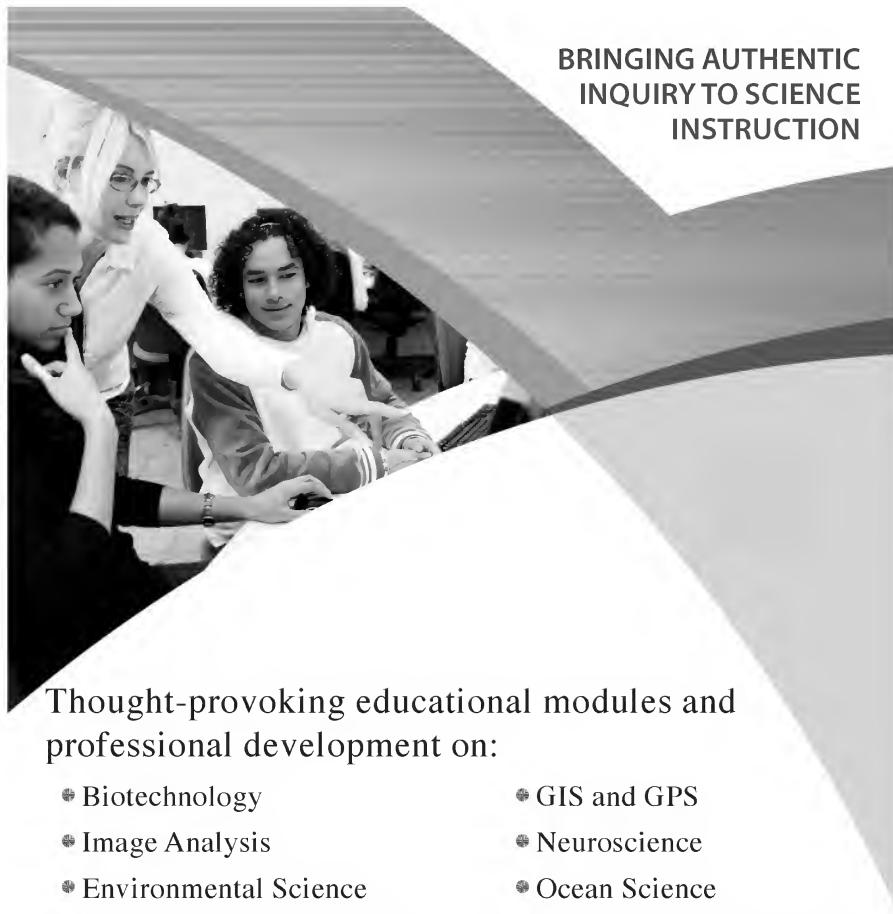
Besides sending abstracts of papers and posters to the Program Committee by February 7, 2016, anyone wishing to be considered for an award must send an abstract to the respective award committee chairperson in order to be considered. An abstract must be sent to the chairperson by February 7, 2016.

Preliminary Presentation Instructions

- **Oral presentations** are allotted 15 minutes (12 for talk, 3 for questions) and slides must be in PowerPoint format on a USB memory drive.
- **Posters** should fit into a 46" x 46" space and will be displayed for an entire day (Friday or Saturday). Poster presenters should be prepared to stand by their posters for a designated one hour period.

Presenters will be notified of the day and time of their presentation in mid-March and will be scheduled according to topic preferences and date of abstract submission. If you must have a specific time or day for your presentation, please indicate so in the comment section of the abstract submission program.

If you have any questions, please contact the Program Chair, **Dr. Howard Neufeld** at: neufeldhs@appstate.edu; tel: 828-262-2683. ☞



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ASSOCIATION OF SOUTHEASTERN BIOLOGISTS
Bylaws Amendments to Accommodate Electronic Voting

Present (4/2/2015 Revision) :

Article II - Election of Officers

- Section 1. The Nominating Committee shall select annually at least one nominee for each office to be filled. Members may recommend to the Nominating Committee persons for any office.
- Section 2. The slate of nominees shall be presented to the membership prior to the Annual Meeting, and the election shall be held during the business session of the Annual Meeting. Nominations will be received from the floor or may be written on the ballot. Each candidate must verify a willingness to serve if elected.
- Section 3. The Secretary shall prepare ballots which shall be distributed and collected by three tellers appointed by the President. A majority vote will constitute election to office.
- Section 4. During the Annual Meeting, those elected shall be presented to the membership. All ballots shall be deposited with the Secretary who shall retain them for 1 year.

Proposed:

Article II - Election of Officers

- Section 1. The Nominating Committee shall select annually at least one nominee for each office to be filled. Members may recommend to the Nominating Committee persons for any office.
- Section 2. The slate of nominees shall be presented to the membership prior to the Annual Meeting, and ~~the election shall be accepted or modified by held during the business session of the Annual Meeting.~~ **nominations will be received from the floor or may be written on the ballot during the business session of the Annual Meeting.** Each candidate must verify a willingness to serve if elected.
- Section 3. ~~The Secretary shall prepare ballots which shall be distributed and collected by three tellers appointed by the President. A majority vote will constitute election to office.~~ **The close of nominations from the floor will establish the final slate of nominees which will be sent to the membership by the Secretary in the week following the Annual Meeting**
- Section 4. ~~During the Annual Meeting, those elected shall be presented to the membership. All ballots shall be deposited with~~ **collected one month later by the Secretary who shall report the election results to the Executive Committee and** ~~shall retain them the ballots~~ for 1 year.
- Section 5. **After the election results have been determined, those elected will fill expired terms on the Executive Committee.**

- Section 6.** A President-Elect shall be elected every other year and shall serve a 1-year term, then a 2-year term as President and a 2-year term as Past President.
- Section 7.** A Vice President shall be elected annually. Neither the President nor the Vice President shall be eligible for reelection for the year following her/his term of office.
- Section 8.** A Secretary shall each be elected for a 3-year term and shall be eligible for reelection.
- Section 9.** The Treasurer and an Associate Treasurer shall comprise the Treasury Office. An Associate Treasurer shall be elected for a 3-year term. At the close of her or his term of office, the Associate Treasurer shall become Treasurer, serve a 3-year term, and then may elect candidacy for the office of Associate Treasurer. The Associate Treasurer shall become Treasurer in the event that the Treasurer can serve no longer.

Present (4/2/2015 Revision):

Article X - Amendments

- Section 1. These bylaws may be amended at any Annual Meeting of the Association by a two-thirds majority vote of those present.
- Section 2. Amendments to these bylaws shall take effect at the close of the meeting at which they were adopted.

Proposed:

Article X - Amendments

- Section 1. These bylaws may be amended at any Annual Meeting of the Association by a two-thirds majority vote of those present. **Amendments adopted at the Annual Business Meeting shall be submitted to the membership-at-large for final adoption which shall require a three-fourths majority of those voting.**

GDMC Comment: Again, "Electronic voting" should not be specified nor should any other vehicle of communication. The document should in all parts remain generalized to increase the latitude of application. As written, the membership can be notified by postal service mail, telephone calls, courier, or by e-mail (electronically). In this writing, notification to the membership is assigned to the Secretary as in the present document. However, the Executive Committee should probably reconsider responsibilities of all its members with a view of possible realignment of tasks.

Bylaws of the Association of Southeastern Biologists

Article I - Membership and Dues

- Section 1. Annual dues shall be set by the membership on recommendation by the Executive Committee for the following categories of regular membership: Individual, Student, Sustaining, Contributing, Family, Life, Emeritus, Patron, and Library.
- Section 2. Any member who has been a regular member of the Association for 10 or more consecutive years and who has retired from professional duties may be elected to Emeritus membership by the Executive Committee. An Emeritus member shall have the same rights and privileges as a Regular Member.
- Section 3. Any individual or organization that contributes funds each year, in an amount set by the Executive Committee and approved by the membership, to sponsor an ASB award or otherwise support the Association shall be known as a Patron Member of the Association.
- Section 4. Any organization with a focus on the biological sciences may become an affiliate of the Association of Southeastern Biologists upon recommendation of the Executive Committee and approval of the membership attending the annual meeting. Affiliation does not confer individual membership in the Association on the members of the affiliated organization.
- Section 5. Annual renewal of membership shall require the payment of dues by the first of January. Any member with dues in arrears on the first of July shall be dropped from the membership roster. Members must pay past dues to maintain continuous membership.

Article II - Election of Officers

- Section 1. The Nominating Committee shall select annually at least one nominee for each office to be filled. Members may recommend to the Nominating Committee persons for any office.
- Section 2. The slate of nominees shall be presented to the membership prior to the Annual Meeting, and **shall be accepted or modified by nominations received from the floor during the business session of the Annual Meeting**. Each candidate must verify a willingness to serve if elected.
- Section 3. **The close of nominations from the floor will establish the final slate of nominees which will be sent to the membership by the Secretary in the week following the Annual Meeting**
- Section 4. All ballots shall be **collected one month later by** the Secretary who **shall report the election results to the Executive Committee and** shall retain **the ballots** for 1 year.
- Section 5. After the election results have been determined, those elected will fill expired terms on the Executive Committee.**
- Section 6.** A President-Elect shall be elected every other year and shall serve a 1-year term, then a 2-year term as President and a 2-year term as Past President.

- Section 7.** A Vice President shall be elected annually. Neither the President nor the Vice President shall be eligible for reelection for the year following her/his term of office.
- Section 8.** A Secretary shall each be elected for a 3-year term and shall be eligible for reelection.
- Section 9.** The Treasurer and an Associate Treasurer shall comprise the Treasury Office. An Associate Treasurer shall be elected for a 3-year term. At the close of her or his term of office, the Associate Treasurer shall become Treasurer, serve a 3-year term, and then may elect candidacy for the office of Associate Treasurer. The Associate Treasurer shall become Treasurer in the event that the Treasurer can serve no longer.

Article III - Duties of Officers

- Section 1. The President shall be the executive officer of the Association and chair of the Corporation Board of Directors, for a 2-year term, and shall perform the duties usual to the office. He/she shall appoint, with the advice of the Executive Committee, regular committees, special committees authorized by the Executive Committee, and where appropriate, Association Representatives to other organizations. The President shall approve and sign the internal and external audits at the annual meeting. The President shall notify Emeritus members of their election. The President shall co-chair the Annual Meetings Arrangements Committee with either the President-Elect or with the Past-President.
- Section 2. The President-Elect shall serve a 1-year term during which her/she will keep in close contact with the President and Past President and in effect study the Presidency. In the event that the President-Elect cannot complete her/his term of office, the person who received the next highest number of votes shall become President-Elect. If this person is unable to serve, the Executive Committee shall nominate two candidates for the office, one of whom would be elected by the membership by mail ballots.
- Section 3. The Past President shall serve a 2-year term, and in order to provide continuity in the governance of the Association, shall serve as advisor to the President on matters of past policy. He/She shall serve as Chair of the Resolutions Committee, Nominating Committee, and of the Past Presidents' Council.
- Section 4. The Vice President shall serve a 1-year term and shall be the public relations officer of the Association. He/ she shall organize the program for the plenary of the Annual Meeting. In the absence of the President from any meeting, the Vice President shall discharge the duties of the office, and in the event that the President cannot complete her/his term of office, the Vice President shall become President of the Association.
- Section 5. The Secretary shall keep records of the meetings of the Association and of the Executive Committee, conduct routine business pertaining to the office, prepare and distribute ballots, serve ex officio as Associate Editor of *Southeastern Biology*, and report the activities of the office to the Association at the Annual

Meeting. In the absence of the Treasurer, the Secretary shall assume the duty to authorize by signature any financial transactions belonging to the Treasurer's office.

- Section 6. The Treasurer shall receive and disburse all funds of the Association, keep records of dues received and funds expended, serve ex officio as Business Manager of *Southeastern Biology*, and report the activities of the office annually to the membership. He/she is authorized to reimburse the Secretary for expenses incurred in attending the Annual Meeting and interim meetings of the Executive Committee and may be authorized by the Executive Committee to reimburse other officers for expenses incurred in attending one Executive Committee meeting per year. The Treasurer shall keep the Associate Treasurer advised of all transactions of the office.

Article IV - Southeastern Biology

- Section 1. *Southeastern Biology*, the official publication of the Association, shall be published quarterly online or at other regular intervals as may be determined by a vote of the membership upon recommendation by the Executive Committee.
- Section 2. The Journal Editor, responsible for editing and online publishing of *Southeastern Biology*, shall be a member of the Association appointed by the Executive Committee for a term of 3 years. He/She shall be eligible for reappointment for successive 3-year terms.
- Section 3. Upon the recommendation of the Journal Editor, the Executive Committee may appoint an Associate Editor who would assist the Journal Editor in matters related to the online publication of the journal, a News Editor who would assist the Journal Editor in obtaining news of biology in the Southeast, and other editors as needed."
- Section 4. *Southeastern Biology* shall be available online to all members of the Association.
- Section 5. Major changes in editorial policy proposed by the Journal Editor shall be subject to approval by the Executive Committee.

Article V - ASB Web Page

- Section 1. The Association shall maintain an official ASB Web page on the Internet. The ASB Web page shall contain information about ASB officers and the Executive Committee, information concerning the Annual Meeting, news of ASB activities, information of interest to biologists in the southeast, and links to Internet sites of interest to the membership.
- Section 2. The Association Web page will be developed by a Web Administrator. The **Administrator** shall be a member of the Association, responsible for web development, membership database administration, and software updates associated with the Association's web presence. Information posted on all social media will be monitored and updated by the Web Editor. The Editor shall be a member of the Association and shall serve as the contact

person between the Web Administrator and the Executive Committee. The Web Administrator and Editor shall be selected and appointed by the Executive Committee for an indefinite term, and shall be eligible for reappointment for any number of successive 3-year terms.

Article VI - Executive Committee

- Section 1. The Executive Committee shall be in charge of the affairs of the Association and shall direct the expenditure of the Association's funds. The committee shall establish the policies for the Association with the approval of the membership and shall record all policies in effect in the "Leadership Guide for Officers and Committee Members."
- Section 2. The Members-at-Large are eligible for reelection. Should a Member-at-Large leave office prior to expiration of the term, the Executive Committee shall appoint a replacement to serve until the next election.
- Section 3. The President with approval of the Executive Committee shall establish an Archives Office consisting of an Archivist, Associate Archivist, and assistant Archivist each serving a 2-year term. At the close of the Archivist's term, the Associate Archivist assumes that position, and the Assistant becomes the Associate Archivist. The President and Executive Committee can reappoint the former Archivist to the position of Assistant Archivist or appoint someone from the membership to fill that position.
- Section 4. The Archives Office shall be custodian of the permanent records or archives and, with the approval of the Executive Committee, make appropriate arrangements for the collection, care, and maintenance of such records.
- Section 5. The Executive Committee shall appoint a Membership Officer who shall work closely with the Treasury Office and be in charge of all membership-related duties and records including maintaining a membership database. The Membership Officer shall serve a term of 3 years and shall be eligible for reappointment for successive 3-year terms.
- Section 6. For all meetings of the Executive Committee seven voting members shall constitute a quorum.
- Section 7. Serving as the Corporation Board of Directors, the committee shall report to the North Carolina Department of State any changes in specific articles of the Constitution, viz., Article I, Section 2., Article VI, and Article VII that treat the Association's Purpose, Disposition of Property, and Incorporation, respectively. The Board may change its registered office or registered agent by notifying the North Carolina Department of State within 60 days after such change takes effect.

Article VII - Standing Committees

Section 1. The following standing committees shall serve the Association:

- A. Auditing Committee (***Deleted 4/16/2004***)
- B. Committee on Human Diversity (***Editorial name change, April 18, 2008***)
- C. Conservation Committee
- D. Education Committee
- E. Finance Committee
- F. Graduate Student Support Award Committee
- G. Annual Meeting Arrangements Committee
- H. Meritorious Teaching Award Committee
- I. Nominating Committee
- J. Patron Member and Exhibitor Committee (***Deleted 4/15/11***)
- K. Past-Presidents' Council
- L. Place of Meeting Committee (***Deleted 10/1/2011***)
- M. Poster Awards Committee
- N. Publications Committee
- O. Resolutions Committee
- P. Senior Research Awards Committee
- Q. Student Research Awards Committee
- R. Microbiology Awards Committee
- S. Membership Benefits Committee
- T. Program Committee
- U. Affiliate Societies Committee
- V. John Herr Lifetime Achievement Award

Section 2. Committee members, except for those who serve ex officio, shall be appointed by the President upon the approval of the Executive Committee. The composition and duties of the standing committees shall be as follows:

- A. The Auditing Committee (***Deleted 4/16/2004***)
- B. The Committee on Human Diversity shall promote career opportunities in the biological sciences for women, minorities, and individuals with disabilities and implement programs to eliminate barriers that restrict the access of underrepresented groups to biological careers. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
- C. The Conservation Committee shall accumulate facts about environmental issues; shall, where it deems appropriate, disseminate such information to the membership; and shall bring resolutions addressing issues of significance to the Executive Committee for presentation to the membership through the Resolutions Committee. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
- D. The Education Committee shall explore ways and means by which the Association might contribute to improve biological education at all levels. Where feasible, the committee shall organize symposia and workshops for the Annual Meeting

- designed to acquaint the membership with new pedagogy and critical issues in biological education. The committee shall have the responsibility for identifying an outstanding teacher to receive the Lucrecia Herr Outstanding Biology Teacher Award. The committee shall consist of six members appointed for terms of 3 years, with two members appointed annually and serving as Co-Chairs in the third year.
- E. The Finance Committee shall review the finances of the Association, prepare budget projections for future years, and recommend actions regarding dues structure and other financial matters to the Executive Committee. The committee shall consist of the ASB Treasurer (Chair), Past President, President-Elect **or Vice President**, and a member of the Executive Committee.
 - F. The Graduate Student Support Award Committee shall make monetary awards to assist graduate students to attend the Annual Meetings of ASB. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
 - G. The Annual Meeting Arrangements Committee in consultation with the Executive Committee shall propose to the Executive Committee the site and venue for the annual meeting, provide for meeting space needs in consultation with the Program Committee, and negotiate the costs for space, food, and services. The Committee will engage in meeting audiovisual needs, arranging field trips, and managing the silent auction. The committee shall consist of the President, all six Members-at-Large, and the President-Elect or the Past-President.
 - H. The Meritorious Teaching Award Committee may each year select for the award a member of the Association who has taught biology for at least ten years in any college or university represented in the Association and has been a member of the Association for at least ten years. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
 - I. The Nominating Committee shall, with due consideration of suggestions received from the membership, select annually at least one nominee for each office to be filled. The committee shall consist of three members, one of whom is a recent past president who shall serve as the Chair.
 - J. The Patron Member and Exhibitor Committee (**Deleted 4/15/11**)
 - K. The Past Presidents' Council, composed of the Past Presidents attending the Annual Meeting with the current Past President serving as Chair, shall review and discuss major issues under consideration by the Executive Committee and, where appropriate, shall share its consensus view with the Executive Committee on the resolution of these issues.
 - L. The Place of Meeting Committee (**Deleted 10/1/2011**)

- M. The Poster Awards Committee may each year select a recipient of the Association Poster Award for the meritorious presentation of original research by members at the Annual Meeting. The Committee shall consist of six members appointed for terms of 3 years, with a member appointed annually and serving as Co-chairs in the third year.
- N. The Publications Committee shall provide oversight of the Association's publications, consider requests for special publication activities, and recommend any alteration of publication policy to the Executive Committee for approval and subsequent approval by the membership. The committee shall consist of three of the Members-at-Large of the Executive Committee and the Editor (ex officio).
- O. The Resolutions Committee shall formulate and, with approval of the Executive Committee, present to the membership such resolutions as may be considered worthy of action by the Association. The committee shall be served by the Past President as Chair and two additional members with terms of 1 year.
- P. The Senior Research Awards Committee may each year select a recipient of the Association Senior Research Award for the meritorious presentation of original research by a senior member at the Annual Meeting. The recipient must have been a member of the Association for at least four years. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
- Q. The Student Research Awards Committee may each year select the recipients of the Association Student Research Prizes for the meritorious presentation of original research by a student member at the Annual Meeting. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
- R. The Microbiology Awards Committee may each year select a student or senior member of ASB to receive the Microbiology Award for the meritorious presentation by a senior member at the Annual Meeting. The recipient must have been a member of the Association for at least four years. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
- S. The Membership Benefits Committee shall assist the Membership Officer in the development and implementation of member benefits, and in the recruitment and retention of members. The committee shall consist of the Membership Officer (Chair) and three (3) members appointed for terms of three (3) years, with one a member appointed annually.
- T. The Program committee shall solicit abstract submissions for the annual meeting in the October issue of Southeastern biology, provide a mechanism for the electronic submission of abstracts,

establish appropriate sessions for presentations, and prepare the program for publication on the webpage and in *Southeastern Biology*. The committee shall consist of three members, appointed for indefinite terms, with the President appointing one member to serve as Chair.

- U. The Affiliate Societies Committee shall bring all proposals, problems, and concerns of the Affiliate Societies to the Executive Committee for action. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year. The member appointed annually shall be selected from a new affiliate society, one that has not currently furnished a member for the committee.
- V. The John Herr Lifetime Achievement Award Committee shall consider proposed recipients of the award and shall notify the Executive Committee of their selections. The committee shall consist of Three Past Presidents appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.

Article VIII - The Annual Meeting

- Section 1. An Annual Meeting, with colleges, universities, or scientific institutions throughout the Southeast recognized as featured institutions, shall be convened each spring for the purposes of conducting Association business; sharing scientific information through symposia, paper and poster sessions, and workshops; and strengthening social and professional ties among Southeastern biologists.
- Section 2. All titles and abstracts of papers and posters submitted for the program shall be in the offices of the Annual Meeting Arrangements Committee and the Program Committee by the date set by the Journal Editor and shall be presented according to the guidelines in the published Call for Papers.
- Section 3. The maximal time period for the presentation of papers shall be established by Program Committee, and the Chairs of the paper sessions will enforce the established time period.
- Section 4. Papers presented at the Annual Meeting shall be read by members or persons introduced by members.

Article IX - The Enrichment Fund

- Section 1. The Association shall maintain an Enrichment Fund to support long- and short-range objectives to advance biological education through teaching and research. The specific objectives to be supported shall be designated by the Executive Committee and approved by the membership.
- Section 2. The Enrichment Fund shall be under joint management of a Board composed of the Executive Committee and Finance Committee and guided by a Chair appointed by the President for a term of 3 years. This Board shall be responsible for the prudent investment of all Endowment Funds of the Association and for planning and

- directing the recruitment of funds from the membership and external sources. The Chair shall report the current status of the Enrichment Fund to the Association at the Annual Meeting.
- Section 3. The Board shall receive and administer bequests and other property from any source and shall have the authority to buy, sell, exchange, lease, transfer, or otherwise dispose of any property, real or personal, with respect to the Enrichment Fund.
- Section 4. Bequests and gifts without specific designation (General Fund) shall be designated by the Board for any established educational objective of the Association. Bequests and gifts received for specific purposes shall be either applied directly to the intended purpose (Restricted Funds) or placed in an Endowment with only the annual earnings applied to the intended purpose in accordance with the wishes of the donors. Endowments may be named in honor or memory of individuals or for the intended purpose and may be established for existing educational objectives or others approved by the Board.
- Section 5. Income Allocation - The General Fund, Restricted Funds, and Endowments shall be allocated income at the end of the fiscal year based on the average balance of each fund in the total amount of Enrichment Funds invested for that year.
- Section 6. Investment Policy - In order to protect the contributions to the Enrichment Fund for their intended objectives, the Board shall strive to invest funds only in conservative investment vehicles offering the highest interest rates or earnings at the time of purchase. Since changes in the economy and other factors greatly affect interest rates and earnings, funds shall be invested up to a period of 5 years unless otherwise approved by the Board.
- Section 7. An audit of the Enrichment Fund shall be made at the close of each fiscal year by an external auditor and which audit will then be approved and signed by the president at the annual meeting in April.

Article X - Amendments

- Section 1. These bylaws may be amended at any Annual Meeting of the Association by a two-thirds majority vote of those present.
Amendments adopted at the Annual Business Meeting shall be submitted to the membership-at-large for final adoption which shall require a three-fourths majority of those voting.
- Section 2. Amendments to these bylaws shall take effect at the close of the meeting at which they were adopted.

Revised March 31, 2016 or April 1, 2016 depending on the date of the Business Meeting, 2016

Constitution of the Association of Southeastern Biologists

Article I - Organization

- Section 1. The name of this organization shall be The Association of Southeastern Biologists.
- Section 2. The purpose of this Association shall be to promote the advancement of Biology as a science by encouraging research, the imparting of knowledge, the application of knowledge to the solution of biological problems, and the preservation of biological resources.
- Section 3. Notwithstanding any other provision of these Articles, the corporation shall not carry on any other activities not permitted to be carried on (a) by a corporation exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code of 1986 (or the corresponding provision of any future United States Revenue Law) or (b) by a corporation contributions to which are deductible under 170(c)(2) of the Internal Revenue Code of 1986 (or the corresponding provision of any future United States Revenue Law).

Article II - Membership and Dues

- Section 1. Membership shall be open to all persons interested in the biological sciences.
- Section 2. Membership shall be granted to any eligible individual, institution, or corporation upon receipt of a written application and dues payment for the current year.
- Section 3. Each member shall pay annual dues in accordance with her/his category of membership. Annual dues include online access to *Southeastern Biology* and eligibility for subscriptions at reduced costs to other journals sponsored by the Association.

Article III - Officers

- Section 1. The Officers of the Association shall be the President, Vice President, President-Elect, Past President, Secretary, Treasurer, and Associate Treasurer.
- Section 2. The term of office is 3 years for the Secretary and Treasurer, and Associate Treasurer, 2 years for the President and Past President and 1 year for the other offices.

Article IV - Executive Committee

- Section 1. The officers of the Association, six ~~(6)~~ Members-at-Large elected by the membership, the Journal Editor of *Southeastern Biology*, the Membership Officer, the Web Editor of ASB, and Members of the Archives Office shall constitute the Executive Committee. The Journal Editor, Web Editor, Membership Officer, Associate Treasurer, and Members of the Archives Office shall be ex officio, nonvoting members with the right to discuss all issues

and to propose motions. Members-at-Large shall serve terms of 3 years with two members elected each year.

Section 2. The Executive Committee shall meet in the fall of each year and in the spring during the Annual Meeting of the membership.

Section 3. The Executive Committee shall serve additionally as the Corporation's Board of Directors.

Article V - Annual Meeting

Section 1. The Annual Meeting of the Association shall be held in April at such place as may be recommended by the Executive Committee and approved by the membership. The date of the meeting shall be determined by the Executive Committee.

Section 2. The Executive Committee may change the time and place of the Annual Meeting and may call special meetings of the Association.

Section 3. Notice of all special meetings shall be sent to each member at least two (2) weeks before the dates on which such meetings are to convene.

Section 4. Fifty (50) members of the Association shall constitute a quorum for the transaction of business at the Annual Meeting or at any special meeting.

Article VI - Disposition of Property

In the event of the dissolution or termination of this corporation, after paying or adequately providing for the debts and obligations of the corporation, the remaining assets shall be distributed to a non-profit fund, foundation, or corporation which is organized and operated exclusively for charitable, educational, and/or scientific purposes and which has established its tax exempt status under section 501(c)(3) of the Internal Revenue Code or shall be distributed to federal, state or local government for a public purpose.

Article VII - Incorporation

The Association of Southeastern Biologists is incorporated as a non-profit scientific, and educational organization without capital stock and one solely engaged in lawful activity as permitted by Section 501(c)(3) of the Internal Revenue Code of 1954, as amended, and by Chapter 55A-86 of the General Statutes of the State of North Carolina. No member shall have any title or interest in the property of the Association, and no dividends or profits shall be declared or paid to any member. ***Pending approval by the Internal Revenue Service. Approval received from the Internal Revenue Service April 24, 2015 retroactive to May 10, 2010.***

Article VIII - Audit

Section 1. The fiscal year for the Association is January 1 through December 31.

Section 2. The financial records of the Treasurer and of the Board of Trustees of the Enrichment Fund shall be audited by the Finance Committee at the close of the fiscal year at least 30 days prior to the annual meeting with the results included in the committee's annual report to the Executive Committee. An audit shall also be conducted at least 30 days before the annual meeting in the third year of the

Treasurer's term by an external auditor approved by the Executive Committee and which audit will then be approved and signed by the president at the annual meeting.

Article IX - Archives

- Section 1. Documents to be archived shall be collected by the Archives Office consisting of an Archivist, Associate Archivist, and Assistant Archivist. The Archivist shall serve a 2-year term and may at the President's Section 1. Documents to be archived shall be collected by the Archives Office consisting of an Archivist, Associate Archivist, and Assistant Archivist. The Archivist shall serve a 2-year term and may at the President's discretion, and Executive Committee's concurrence, be reappointed as Assistant Archivist as the present Assistant assumes the office of Associate Archivist and the present Associate becomes the Archivist.
- Section 2. The Archives of The Association of Southeastern Biologists shall be maintained permanently at the University of Georgia, Athens, Georgia.

Article X - Amendments

- Section 1. This Constitution may be amended at any Annual Business Meeting by a three-fourths majority of those voting provided due notice has been sent by the Secretary to the membership at least 30 days in advance of the meeting, provided the amendment has been proposed either by the Executive Committee or otherwise by a committee authorized by the Association at a previous Annual Meeting, and provided that so long as the Association shall be or remain an organization exempt under Section 501(c)(3) of the Internal Revenue Code of 1954, as amended, no amendment shall be made to Article I, Article VI, or Article VII of this constitution without consent having been obtained from the Internal Revenue Service and having been reported to the North Carolina Department of State.
- Section 2. Amendments adopted at the Annual Business Meeting shall be submitted to the membership-at-large for final adoption which shall require a three-fourths majority of those voting.

Revised March 31, 2016 or April 1, 2016 depending upon the schedule for the Business Meeting, 2016

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**ASSOCIATION OF SOUTHEASTERN BIOLOGISTS
EXECUTIVE COMMITTEE MEETING
WEDNESDAY, 1 APRIL 2015
CHATTANOOGA, TENNESSEE**

In Attendance: Emily Gillespie, Ashley Morris, Don Roush, John Herr, Jim Caponetti, Sarah Noble, Zack Murrell, Ed Lickey, Joey Shaw, Judy Awong-Taylor, Conley McMullen, Bill Ensign, Chris Fleming, Ricky Forillo, John Quinn, Peggy Kovach, Christi Magrath, Kunsiri Chaw (Pum) Grubbs, Mike Held

- I. Call to Order and Welcome** – President Zack Murrell
a. 13:29 EDT

II. Approval of the Executive Committee Meeting Minutes from 20 September 2014

III. Officers and Executive Committee Reports

A) President – Zack Murrell

- a. We are in much better shape this year, due to a tremendous amount of work by Ed and everyone on the EC.
- b. We appear strong financially, CVENT is working, Committee structure has been shored up and Chair rotation is good, ad hoc Award Committee is working very well.
- c. The challenge for us on Saturday, we cannot sustain this kind of “crazy” effort over years, therefore it is critical that we get a meeting planner.
- d. Reinstate Tax Exempt Status then seek Endowments, more Exhibitors, Fundraising, Affiliates. Membership is faced with reduced travel budgets.
- e. Paid Chris for his hours and expertise this year, so now we have an idea of the True Cost of CVENT
- f. Thank you to EC for stepping up and working to make things happen.
- g. Jim and John have been tremendous role models for us! They are both much appreciated.
- h. 2 PM (today) deadline for food issues, Joey has put in a tremendous amount of work on this, our number of Registrants continues to rise.

B) President Elect – Joey Shaw

- a. Thursday night will be capped at 625
- b. With Thursday night we are losing money.
- c. Cover entire meeting out of Registration fee, then some fee for Thursday and Friday evenings, we need to rethink Wednesday night being a “free” event (~900 have planned to attend this year) Looking forward on design of registration page and how it can inform us in our meeting planning.
- d. As of now, 896 registrants, Thurs cap at 625, Friday night may need capped as well.

- e. Last year we had about 80 people register on site. Not sure how that will translate for this year, maybe 100 more? Last year the number was a lot of Tri-Beta, more have registered ahead this time. We have far exceeded our projected numbers.
- C) Past President – Don Roush
 - a. Past Pres. Meeting in Spartanburg
 - b. Communicated with other Past Presidents
- D) Vice President – Ashley Morris
 - a. Registration page needs simplified (revisit on Saturday)
 - b. Invited Plenary Speaker, and will host
 - c. Took over back in March for working with Exhibitors
 - d. Most Exhibitors had not Registered, something we need to address for next year so their ticket needs are met (revisit on Saturday)
 - e. Andy has taken over now in the Exhibit Hall
 - f. Larger companies need 6-12 months advance, we need to restructure package and structuring
 - g. Revisit Exhibitors on Saturday
- E) Secretary – Sarah Noble
 - a. Phone minutes would be made better if we had access to Judy's recordings
 - b. Take our time, and take turns speaking.
 - c. Continue with Zoom meetings- Judy
 - d.
 - e. Reorganize and standardize Google Docs- Ashley
- F) Treasurer – Ed Lickey
 - a. We identified irregularities in our books and are pursuing our options
 - b. We have been recompensed \$6000, and have received a compilation from 2013
 - c. We have IRS filings back to 2007 completed
 - d. We are sitting at \$135,000 right now, having paid bills up to date and CCC deposit
 - e. \$12, 0000 still stuck in PNC checking account, this has not been useful there fore needs closed now as it is very inconvenient and not well accessible. We are being charged, so will terminate.
 - f. \$10, 000 in Wells Fargo CD that has rolled-over
 - g. PayPal is at \$16, 000 that needs transferred to Checking soon
 - h. Savings is at \$13, 000
 - i. Enrichment fund \$43,000 end of 2013, we don't advertise actively but have been donated 300 since. This needs moved into a separate account (savings).
 - j. Possible convert Enrichment Fund to Endowment Fund, SABS provides a great model

- k. Taxes 1023s are in, end of Dec, four items needed addressed.
 - i. Language in Constitution "501C-3" article 7
 - ii. Fill out 990s back to 2007 (data from Treasurer's Reports in SEB)
- G) Archivist – John Herr
 - a. Sent report as email attachment
 - b. Events has effect on Archiving process
 - c. Four signatories on bank account
 - d. Assisted with IRS tax exempt status
 - e. Archives to Hargrove Library in Athens - new contact Catherine Stine.
 - f. Next trip will be to Boone, to take all files empty and hard copies of SEB when they come through
 - g. Included updated Archive System in written report
- H) Journal Editor – Jim Caponetti
 - a. All up to date with Journal
 - b. Needs Awards Reports from Chairs, as soon as they get back from this meeting (before they disappear for the summer!)
 - c. Diane Nelson's paper
 - d. Over 500 Abstracts submitted
- I) Web Editor – Ashley Morris
 - a. Made a new website
 - b. Chris worked really hard on the build
 - c. Have not checked traffic yet (>2,000 new visitors, 4 minutes average session- Chris)
 - d. Two APPs Chris built, apple and Droid
 - e. Facebook 600+ Likes
 - f. John Quinn (ornithologist) to be added to FB team
 - g. Chris Web administrator, Ashley Web Editor

III. Committee Reports

- A) Annual Meeting Arrangements Committee 2015 – Zack Murrell
 - a. Volunteers - to be reimbursed after they work assigned times
 - b. Ashley, Andy, Nic have been working with exhibitors
 - c. PowerPoint for Wednesday night - Ashley
 - d. Zack talks about science and higher education, why ASB is ASB
 - i. Introduced Ainsworth
 - ii. Catania
 - e. Post-Plenary Social
 - f. Thursday morning Past Presidents Breakfast – Zack and Don
 - g. Thursday morning Patron s and Exhibitors Breakfast – Joey (usually Pres-Elect and VP)
 - h. Posters good
 - i. PULSE posters good
 - j. Symposium – Extreme habitats
 - k. ASB talks
 - l. Coffee breaks under purchased, but Concession stands will be open 9:30-3:30

- m. 70 people Diversity Lunch Jay and Valerie put together agenda. Zack will welcome.
 - n. SHC SC Ashley, Zack will talk about SERC
 - o. Roland Roberts NSF Funding meeting
 - p. 5:15 Business meeting
 - q. Joey-6-7:30 BBQ dinner
 - r. 6:30 Ducks (4 w capacity of 28) Take people to the Aquarium at 6:30. 120-150 people per 20 minute run.
 - s. Aquarium party goes to 11:15. Shuttles return around 10:30. Everyone should be back to CCC by midnight.
 - t. Cash bars at CCC, open bars at Aquarium (bottled beer only-until it runs out)
 - u. Chris, Joey, and Judy makes sure bands get fed
- B) Friday
- a. SABS and BSA Breakfast
 - b. Business Meeting Tri-Beta
 - c. PULSE
 - d. Posters
 - e. PULSE Lunch
 - f. Education Committee Lunch-Zack will visit
 - g. How can we use "free-lunch" to harness/ lure to get solid ASB work done via Volunteers-Joey
 - h. Cedar Glades Symposium
 - i. Afternoon PULSE is open to everyone
 - j. SABS BSA student reception
 - k. Awards banquet-ppt ok
- C) Annual Meeting Arrangements Committee 2016 – Zack Murrell
- a. UNC Charlotte, CTI. Davidson College
 - b. *Still need to find a venue for Friday night Social*
 - c. Thursday-Sunday April 7-10
 - d. May- visit to Charlotte by Joey and Zack
- D) Annual Meeting Arrangements Committee 2017 – Joey Shaw
- a. Nothing in place
 - b. Very Enthusiastic group at Columbus, GA
 - c. Going back to traditional Thurs-Sat Meeting time
- E) Nominating Committee – Don Roush
- a. Candidates for VP, Treasure, Associate Treasure, Members-at-Large 2 3-year terms, 1 1-year term followed by running for three-year term
- F) Resolutions Committee – Don Roush
- a. Appreciation
- G) Program Committee – Howie Neufeld
- a. Ricky, discussed change of Chair.
 - b. Program print cost went up this year
 - c. Earlier notice of symposia and workshops
 - d. Fall EC Location?
 - e. Session topics relevant
 - f. Usable dates in written report
 - g. We need more appropriate chain of responsibility/ framework – Zack

- H) Publications Committee – Judy Awong-Taylor
 - a. Committee formed late Oct/early Nov
 - b. Hoping to really get going this year
 - c. Not totally clear what their job is
 - d. We need to embrace our Journals in a more effective way-Zack
 - e. Do we need a *Publicity* Committee? –Zack
 - f. Southeastern Naturalist, Caribbean Naturalist, Urban Naturalist
Make them a Member Benefit? Ask them to publish announcements, reduced page charges, reduced subscription
- I) Microbiology Research Awards Committee – Chris Gissendanner
 - a. Worked with ad hoc Awards Committee
- J) Graduate Student Support Awards Committee – Jennifer Borgo
 - a. 18 applications, 9 institutions
 - b. \$3400 in Awards
 - c. Request for student banquet funding
 - d. Need to publicize cap on amounts awarded
 - e. Clarify structure
- K) Finance Committee – Ed Lickey
 - a. Has not met
 - b. As soon as Ed has 990 and bank information from 2014, he will share with the committee to look over
- L) Committee on Human Diversity – Valerie Burnette
 - a. Recruitment of new members
 - b. Jay and Emily are now on Committee
 - c. Talked about workshop to recruit members
 - d. Six lunch attendees last year
- M) Education Committee – Kirk Stowe and Chris Havran
 - a. Symposium on Biological Field Stations
 - b. Working on manuscript
 - c. New Chair taking over
- N) Meritorious Teaching Award Committee – Jennifer Davis
 - a. Will be presented at Banquet
- O) Conservation Committee – Kunsiri Chaw (Pum) Grubbs
 - a. Photo contest- students only, of rare/endangered species registration and \$100 gift card?
 - b. Propagation of rare/endangered flora/fauna (Symposium???)
 - c. Clean up natural habitats? Bio-blitz field trip in Concord
 - d. Emily Gillespie rotates into Chair-ship
- P) Poster Awards Committee – Bill Ensign
 - a. Chair of Ad hoc Awards committee “co-opted” his job
- Q) Senior Research Award Committee – Dawn Wilkins
 - a. No completed applications, six partials

- R) Student Research Awards Committee – John Quinn
 - a. Only one applicant this year, need to revise to attract more applicants
 - b. Needs to have a full paper published
 - c. People not making themselves aware of requirements
- S) Membership Benefits Committee – Sarah Noble
- T) Ad Hoc Awards Coordinating Committee – Bill Ensign
 - a. More poster awards?
 - b. Rubric good for scientific process, but not content

IV. Affiliate Society Reports

- A) AAAS – no representative
- B) AIBS – no representative
- C) NSCA – no representative
- D) BBB SE District 1 – Lee Sutton
- E) BBB SE District 2 – Christi Magrath
 - Papers, Posters, Field Trips
 - Good communication and attentiveness from ASB
 - Easter week bad for students (We never Traditionally met on Easter week)
- F) SABS – Kathy Mathews
 - Issues akin to ours regarding Membership
 - Potentially use CVENT to recruit Affiliates (allow Access? What would we charge them?)
 - Mike Held – Continual leakage of members each year, need some type of membership management system to easily and quickly communicate with membership, currently in Excel.
 - Use as a member recruitment tool? Current Membership estimate: 475-480, high of 750-800. Leaking at ~25% per year. Gain about 12% of previous years as new members. Need online membership other than PayPal. Continue on Saturday
- G) BSA-SE – Emily Gillespie
 - Very diffuse relationship for a while
 - Gather for discussion at Breakfast to revive the relationship with ASB
 - Joint student mixer on Friday afternoon with SABS
- H) ESA-SE – David VanderMast
- J) HC – Andrea Weeks
 - h. SHC Mothership Update emailed to Ashley
 - i. Website was completely revised
 - j. ActivP fb page
 - k. Paypal functional on website
 - l. 501C3 status officially granted

V. Old Business**VI. New Business**

Resolution Chattanooga

Don – Move to adopt the Resolution of Appreciation as edited to be presented at the Business Meeting Thursday at 5:15

Second – Ed

Resolution Tennessee de-tenure

Concern over impressions and fact-checking

Call to be made by noon tomorrow, John and Joey will work on clarification and fact-checking. EC Members to check in at ASB Table

Bylaw changes

Limitation of nominees to one

Motion carried unanimously

Web Editor (Article 5 Section 2)

Ed Move accept as read

Don Second

Vote Unanimously Pass

VII. Announcements**VIII. Adjourn –**

Motion to Adjourn – Bill

Second – Joey

Adjourned at 17:43 EDT

Move To Saturday

I. Uniformity of Pricing/ Formal advertised Fee Structure (we have *too many* options)

Day Rate? No

Guests- special Badge or Ticket (Policing-color code?)

Kids

II. Affiliates needed, Form Affiliate Committee, shore up this relationship?

III. Science in Higher Education, ASB “Keepers of the Flame” as Universities continue to corporatize.

IV. Possibly Expand Diversity Committee (Valerie)

**ASSOCIATION OF SOUTHEASTERN BIOLOGISTS
76th ANNUAL BUSINESS MEETING
THURSDAY, 02 APRIL 2015
CHATTANOOGA, TENNESSEE**

- 1. Call to Order and Welcome** – Zack Murrell 17:15 EDT
 - a. Reflection on last year's meeting and this year
 - b. We are strong this year
 - c. Nearly 1000 registrants for 2015 meeting
- 2. Approval of the Minutes**
 - a. Motion Don Roush
 - b. Second Randy Small
 - c. Passed unanimously
- 3. Constitution changes Article IV**

Motion Carried
- 4. Constitution Change Article VIII**

Motion and Second from EC
Discussion followed
Vote: Carried Unanimously
- 5. Bylaws**
 - a. Change to Article II
Lively discussion followed
Motion: yes
Second: yes
Opposed: no
Amendment proposed by Claudia Jolls: At least on nominee annually
Motion: made
Second: seconded
Carried Unanimously
 - b. Bylaws Change to Article III
Motion Carried Unanimously
 - c. Bylaws Change Article VI
Carried Unanimously
 - d. Bylaws Change Article V
Carried Unanimously
 - e. Article VII (D and G)
Carried Unanimously
 - f. Article VII (I)
 - a. Motion Jim Caponetti

- b. Second _____
 - c. Friendly Amendment added
 - d. Carried Unanimously
 - g. Article VII (U and V)
 - a. Discussion followed
 - b. Bill Ensign proposed friendly amendment, seconded, Carried
- 6. Election of Officers**
Call for nominations from floor
Move nominations be closed, second, passed unanimously
Movement Slate of Candidates be accepted by acclamation, seconded, carried unanimously
- 7. Treasurer's Report** – Ed Lickey
 - a. Good report given, copies offered to any who may want them
 - b. Reported good numbers showing gains in 2013 and 2015
 - c. Pat Parr Expressed Appreciation to Ed for all of his efforts as Treasurer, Seconded by Zack Murrell
 - d. Big help was Chris Fleming getting online payment set up
 - e. Tracy Deem helped, too (Ed)
- 8. Recognition of Members Who Passed in 2014-2015**
Marry Connell
Wade T. Batson
Elsie Quarterman
John Farey
Moment of Silence for the above members
- 9. Members Requesting Emeritus Status**
 - a. Passed unanimously
- 10. Resolutions** (Read by Don Roush)
 - a. Resolution of Appreciation - Motion and second from EC, Passed unanimously
 - b. Resolution to the University of Tennessee board of Trustees Tabled
- 11. Announcements**
- 11. Adjournment**
Motion: Randy Small
Second...
Meeting Adjourned at 18:36 EDT

Respectfully Submitted,
Sarah Marie Noble
Secretary, Association of Southeastern Biologists
02 April 2015

**ASSOCIATION OF SOUTHEASTERN BIOLOGISTS
EXECUTIVE COMMITTEE MEETING
SATURDAY, 4 APRIL 2015
CHATTANOOGA, TENNESSEE**

Began 8:15 AM EDT

Welcome & Introductions

In Attendance: Joey Shaw, Shannon Gordon, Zack Murrell, Jim Caponetti, Sarah Noble, Chris Fleming, Bill Ensign, Conley McMullen, Judy Awong-Taylor, Christi Magrath, Ricky Fiorillo, Ashley Morris, Peggy Kovach, Ed Lickey, Emily Gillespie, Dawn Wilkins, Jennifer Davis, Tracy Deem, Claudia Jolls, Valerie Burnett, Kirk Stowe, Chris Havran, Kathy Matthews, Erica Scocco

1. Meetings

Chattanooga Meeting Overview (Joey, Zack, Ashley, Shannon)

Successes

- 977 People at Meeting
- Overall logistics went well
- Excellent Social

Failures

- Coffee break on Friday afternoon
- Exhibitors leaving early

Timeline for payments to clear debts

- About a month

Post-Meeting Survey

- Exhibitors
- Membership

Create hard deadlines for next year.

Abstract submission

Pricing Plan and fees determined

- Ideally same as Abstract submission opens
- December 1st

Early registration

- End first week of March

Late registration

- Different than On-site Registration

Other

- Checking boxes for lunches, then people not showing up
- June Save-the-Date for Exhibitors
- Link with information for Undergrad/Grad students

Concord 2016

Zack and Joey will go to site this May/June to do a walkthrough.
 Who else should do this? Ricky (yes)
 We need a venue for the "Thursday Night Social"
 Information campaign for shifted time frame.

Columbus 2017

Work on contracts...

2. Committee updates / anything to talk about?

AMAC

2016 Ed and Conley for Concord
 2017 Ricky and Peggy for Columbus
 2018 site Joey is looking into Gatlinburg

- Deep South suggestion, periphery
- We need a collective of boots-on-the-ground in host city.
- Have an area on website for people to suggest their areas for future meetings

Conservation Committee

Education Committee

- Need to know at the beginning of the school year for planning for Professional Development
- Contact NC Board of Education for Continuing Education Concord, also NTBT (New Affiliates Committee to work with Education Committee on this)
- Kirk Stowe volunteered to co-Chair this committee
- SENA database access?
- Two-year continuation award for Teacher of the Year, last year's to welcome this year's, make it a Legacy
- Possibly recruit AP biology teachers and students
- ASB Members to mentor high school classes?

Finance Committee

Graduate Student Support Awards Committee

- Also explore Award opportunities for undergrads

Human Diversity Committee

- Outreach to International and First Generation Students
- Dispel the myth of "no funding"

Membership Benefits Committee

Meritorious Teaching Award Committee

- Have it on the website, notice from the President's Office helped.

Nominating Committee

Poster Award Committee

- Keep ad hoc Committee

Program Committee

- Increase diversity of science (add categories, add key words?)
- Use Worddle for abstracts
- Reconsider categories
- Have option to pre-order printed Program

Publication Committee

Research Awards Committee – Senior

Research Awards Committee – Student

Research Awards Committee – Microbiology

Resolutions Committee

- Consider a more generic Resolution than the one tabled at Business Meeting, one generic statement that can be used in all States. To put on Website, and maybe send to Chronicle?
- Timeliness of response is key

BBB

- Thanks ASB for putting BBB in the Program and attending
- Request to clarify BBB's relationship to ASB
- Maybe plan an undergrad mixer for universities to recruit grad students

PULSE – Judy report on this year and likelihood of next year

- Successful this year
- Committed to coming again next year based on funding

CVent – Chris

- PayPal has been well used by Membership
- A lot of people became members at registration
- Push for online registration
- 507 entered prior to meeting, once information is entered ~1000 Members
- email reminders to expiring memberships
- Split Patron and Life Member category
- Can provide platform for registration, but not manpower
- Will discuss use of CVENT for SABS Memberships

3. Logistics for future

Abstract submission approval built into abstract submission page. That is, students must have approval of advisor. How can we police this? Problem with duplicate submissions, changes, and withdrawals.

CVent Partnership with SABS as trial for helping affiliates (Kathy Matthews, Chris)

Tax Status + strategy to get tax dollars back? (Ed)

Document of real/true costs to inform membership & future ECs (Joey and Ed).

Monthly newsletter (email from President, Past President, Vice President).

General information

Progress towards next year

- To Membership

Embark on enrichment fund / endowment (after regained tax status)

Program

Howie, Ricky, Chris are back

4. Pricing

Emeritus/retired rate for future – free, or same as students? We need to do something because these older professors are important to keep around.

- Emeritus revisit pricing for membership and modified registration

Uniformity and policing of pricing structure NEEDS DONE AHEAD OF TIME!

Kids, guests (clearly define “Guest”)

affiliate nonmembers (e.g., member of SABS but not ASB)

make it clear on our website.

Exhibitors

Purpose

Pricing structure

Form

Meals

Ancillary charges

Date for having this completed – June?

10% discount for booth renewal at meeting

- True Cost per Exhibitor
- Sponsorship Opportunities

5. Governance

Leadership Guide revision (John Herr). Zack and Joey will lead this, but we need input and help from the entire EC who has been through the hell of the last two years.

6. Information flow and outreach

SEB, future, should typical contents be amended?

- Archival Issue

Retool registration page – Wed night, simplification.

- Simplify, fewer options
- Less “free” things
- Reduced, but not free, box lunches

Incoming committee chairs should be present. (Saturday EC Meetings) Talk about timelines and important things to get done early.

Task publication committee with taking up relationship and benefits from Eagle Hill

Publicity committee?

- New Committee for Communication & Dissemination
- One page blurb of what we are about

7. Looking toward future

Meeting Planner

- What is one worth to ASB? What tasks are we willing to hand over to a Meeting Planner? In an advisory roll.

Ask Zack to lead two issues as Past President: (agreed)

1. Legal issues
2. Awards Structure
 - a. Including the generation of new awards to lure affiliates back in. Herpetology, Ichthyology, Molecular, Physiology, Cell, Genetics
3. Committee structure

Pick up monthly phone meetings in May

8. Strategic Plan

Bill will be asked to suggest ad hoc members and take on leadership

9. Other business

Meeting Adjourned 12:47 PM EDT

Respectfully Submitted,

Sarah M. Noble
Secretary, Association of Southeastern Biologists



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INVITED RESEARCH PAPER**Paradigm Shifts: Moving Toward Sustainability in Landscaping
at Oak Ridge National Laboratory**

**Patricia Dreyer Parr
Natural Resources Manager, Retired
Oak Ridge National Laboratory
Oak Ridge, TN 37830 pdptn@aol.com**

“Well, you might be able to do some of this, but we may need to make some adjustments as we see how things grow in the landscape setting”, he said. I was sharing my landscaping goals with the individual who did a lot of the landscaping work at the Oak Ridge National Laboratory (ORNL) campus and was most familiar with traditional, ornamental types of plants. ORNL had initiated major re-vitalization of 1940’s facilities and surrounding landscapes at the east end of campus and here was the opportunity to expand upon some ideas that others and I had begun to develop. My colleague, Tim Myrick, had led the re-vitalization planning and had listened and incorporated the idea of using native plants in the plan- a huge step. Hawkins Partners, Inc. (2003) had developed a landscaping plan for ORNL east campus and plantings had been made. Now I had been asked to take the lead on an overall landscaping plan for the whole campus (or maybe I begged someone to let me do it), at any rate it became another one of my responsibilities. I was the Natural Resources Manager for ORNL with responsibility for the 34,000 acre Department of Energy (DOE) Oak Ridge Reservation (ORR), but NOT a landscaper. I am not even a good gardener. But I have passion (and had a great network of really smart friends and colleagues as resources) and that kept me from backing down at his response. So we kept talking.

My goal was for the landscaping at ORNL to be unique, ecologically responsible, educational, and to highlight the beauty that occurred naturally in our area. Maybe the situation is similar where you are with hotels, shopping complexes, and businesses beginning to all look the same. All were planted with “pretty”, traditional, non-native ornamentals, many that establish quickly and are hardy (hmmm- sound like the “invasive plant red flag”?). ORNL is the largest and most diverse energy research and development institution within the DOE and is nestled in the Valley and Ridge of east TN- a biologically diverse and beautiful area. I was pushing to use native plants in the landscaping as much as practicable. “Native” plants- to my landscaper colleague meant anything that grows in the US. When I nixed the California poppy, we got into the “native” discussion and I clarified the objective as emphasizing plants in the landscape that occurred naturally on the ORR. And then there was the word “laurel” - to me it was Kalmia, to him it was an ornamental “Otto Luken” laurel. We both had to learn another language to make sure we were communicating and not making mistaken assumptions. I prepared a list of approved plant species for use in

landscaping with common and scientific name and learned that a book with photos for reference was useful.

ORNL management embraced “sustainable development”. The new facilities going up were carefully planned and “green.” I put together a small group, the ORNL Landscaping Review Committee. It consisted of grounds maintenance folks, engineers, biologists, wellness facilitator, and compliance folks. As the concept of “sustainable” landscaping began to gain acknowledgement, the role of this committee increased to advocating the use of ecological approaches to protect and enhance the lab’s environment. This included reviewing and preparing landscaping plans, determining ways to protect existing resources such as riparian areas, planning for appropriate landscaping needed in restoration and mitigations, providing lists of appropriate seed mixes, converting mowed areas to native grasses (and using prescribed burns), and developing maintenance plans. A generic riparian landscaping plan was developed by Environmental Landscaping Design Associates that is adapted for use as needed. Communication among those involved with maintenance as well as ORNL staff and visitors (and senior management) was critical. The landscape had a different look and was maintained differently. Seed pods were not removed from plants until early winter so wildlife could use them, areas once mowed were transitioned to fields, pollinators included “bees.” Walking paths were developed and plant identification signs installed. Figure 1 shows landscaping at a new facility on the west campus.



Figure 1. Landscaping at a new facility on the west campus. Photograph by Patricia Parr.

The Committee began to think more ecologically and moved out from facility landscaping to protecting the larger landscape that made up the footprint of ORNL including forest patches, natural areas, and powerline rights-of-way management. The Sustainable Sites Initiative website and information was a great resource (Sustainable Sites Initiative).

Emphasis on simply using native plants in landscaping shifted to developing plant communities and building wildlife habitat. The new goal became finding ways to have the ORNL developed area not be an island within the larger, mostly forested ORR, but to be better integrated with it. How could we mimic the ecological processes in the healthy forested areas surrounding the campus? This would have benefits for the ORNL site as well as for the larger ORR.

The very deliberate and secretive siting of the World War II Manhattan Project in Oak Ridge, Tennessee resulted in a significant, though unintended, ecological resource. Today approximately 20,000 acres of fairly undeveloped land, within the 34,000 acre Oak Ridge Reservation (ORR), surround areas developed for federal mission work. With public access restricted, the land recovered from the pre-1940s primarily agricultural land uses to become native vegetation communities, primarily hardwood forests.

The ORR is unique and valuable within the region as the largest contiguous protected land ownership in the southern Valley and Ridge Physiographic Province (Parr et. al. 2015). Figure 2 shows an aerial view of part of the ORR.



Figure 2. Aerial view of part of the Oak Ridge Reservation (ORR). Photograph by Jason Richards.

Management of ORR forests and associated ecosystems has evolved considerably over the past 70 plus years. Building on past achievements in erosion control and timber marketing as early goals to current ones of managing a diverse, healthy forest ecosystem in support of Department of Energy research, sequestration of carbon, and other federal missions has widened the vision for management of the forest and created new opportunities. The overall goal of forest management for the ORR is to manage the forest resources of the ORR in support of current and potential future missions, while maintaining forest health, adaptability, and diversity. Present federal missions include operation of research, development, and production for national security efforts; research and development in support of national energy initiatives; and environmental restoration to address legacies of past research, development, and production activities.

When the federal government acquired the land in the early 1940s we know from aerial photos that approximately half of the area was cleared. It was experiencing land use typical of east TN (timbering, grazing, orchards, cultivation) as shown in Figure 3.

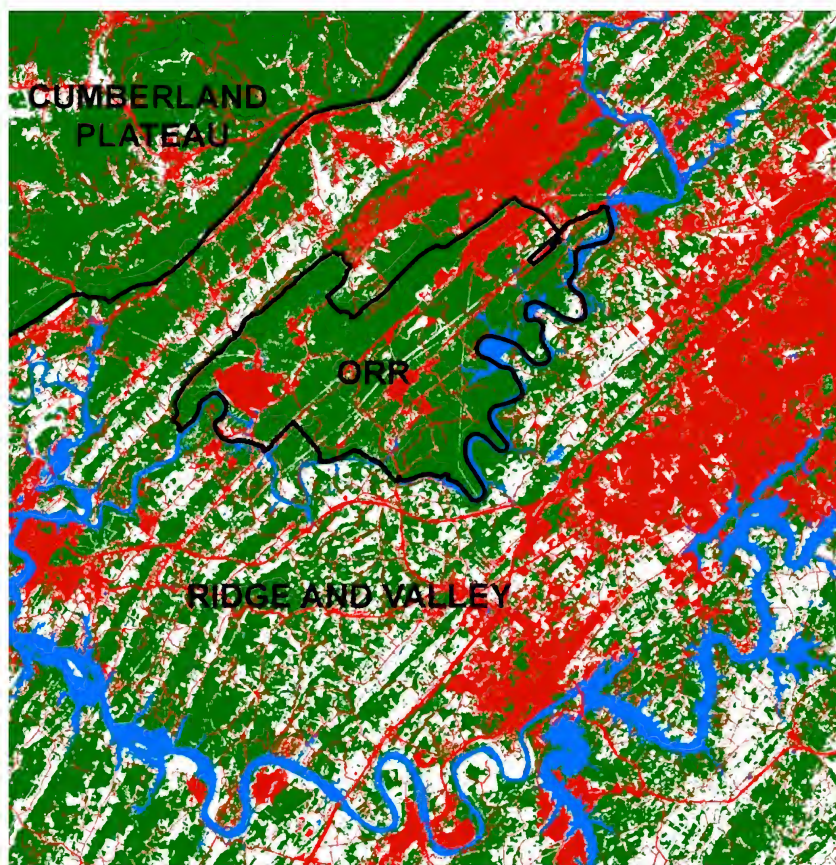


Figure 3. Land use prior to government acquisition (timbering, grazing, orchards, cultivation). Photograph from ORNL.

Once the government acquired the ORR, the land no longer experienced these types of uses - and it began to recover from the erosion, clearing, and other disturbances. Now approximately 75% of the ORR is forested. Today there are





about 20,000 acres of fairly undeveloped land that surround the developed site areas used for DOE mission work.

From satellite imagery, shown in Figure 4, the ORR shows up as an island of “green” adjacent to land that has continued to experience various disturbances. The ORR has become a refuge for species now uncommon outside of its boundaries (National Environmental Research Park website <http://www.esd.ornl.gov/facilities/nerp>).



Regional land cover map prepared
from the 2013 Cropland Data Layer

Class names

| | |
|---|--|
|  Agricultural/pasture land |  Urban land |
|  Forest land |  Water |

Scale

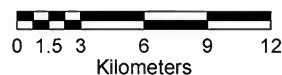


Figure 4. Satellite imagery of the Oak Ridge Reservation (ORR).

Wildlife diversity is represented by 52 mammal species, 229 bird species, 75 fish species, 32 reptile species and 36 amphibian species.

The variety of habitats (example shown in Figure 5 aerial of Freels Bend), along with the significant blocks of unfragmented forest, are important reasons for the wildlife diversity. Endangered species (State or Federal, current and historic) include: Indiana bat, Gray bat, Bewick's wren, peregrine falcon, Bachman's Sparrow, and Lake Sturgeon. Threatened include: spotfin chub, northern saw-whet owl, and northern long-eared bat. Species In Need of Management includes: southeastern shrew, smoky shrew, long-tailed shrew, meadow jumping mouse, southern bog lemming, four-toed salamander, hellbender, tangerine darter, Tennessee dace, anhinga, least bittern, great egret, snowy egret, little blue heron, bald eagle, northern harrier, sharp-shinned hawk, king rail, common gallinule, barn owl, yellow-bellied sapsucker, olive-sided flycatcher, loggerhead shrike, black-capped chickadee, golden-winged warbler, cerulean warbler, vesper sparrow, and Henslow's sparrow (Roy et. al. 2014).



Figure 5. Aerial view of the Freels Bend area. Photographed by Jason Richards.

About 12% of the ORR is contiguous interior forest. More different species of birds (229) have been documented using the ORR than any other single site in the state of TN (Jason Mitchell ref). Sixteen species of birds that are in decline in the Appalachian Region (according to Partners in Flight) have increasing or stable populations on the ORR. Eight of these are on the Species of Concern list (Endangered Species Act-listed and US Fish and Wildlife Service birds of

conservation concern). These are Acadian flycatcher, brown thrasher, blue-winged warbler, KY warbler, summer tanager, field sparrow, worm-eating warbler, and cerulean warbler (Haines and Roy in press; Roy et. al. 2014).

And with both plant and animals, species not previously known to occur on the ORR continue to be found.

Within the forested framework are a variety of habitats such as river bluff (Fig 6), wetlands (Fig 7), old growth forests (Fig 8), and cedar barrens (Fig 9). (Photos by Pat Parr.)



Figure 6. Bull Bluff Natural Area. Photograph by Patricia Parr.



Figure 7. Hembree Marsh Wetland. Photograph by Patricia Parr.



Figure 8. Old growth forest. Photograph by Patricia Parr.



Figure 9. Raccoon Creek Cedar Barren. Photograph by Patricia Parr.

More than 1100 vascular plant species have been recorded on the ORR. Plant species listed as Endangered or Threatened (State or federal, current and historic) include earleaved false-foxglove, Appalachian bugbane, tall larkspur, northern bush-honeysuckle, mountain witch-alder, butternut, slender blazing-star, Canada lily, Michigan lily, fen orchid, heartleaf meehania, tubercled rein-orchid, prairie goldenrod, and shining ladies'-tresses (Baranski and Pounds in preparation). With this impressive diversity, surely we could find appropriate species to use for the majority of the ORNL campus landscaping. But there were challenges ranging from legacy physical land conditions to traditional landscaping mindsets.

When ORNL was developed during the 1940s there was the need for expediency, and environmental considerations were not part of the plan. Legacies we faced, and continue to face, as a result are fill-material with shallow soil cover, buried and channelized creeks, altered vegetation, eroded areas, and highly impacted streams. Figure 10 is a 1943 photo of the developing ORNL site.



Figure 10. The developing ORNL site in 1943. Photograph from ORNL.

It is not surprising that early grounds managers planted whatever they could get to grow. They used favorite ornamentals and, in more recent decades, these included Bradford pear, burning bush, and privet.

A campus landscaping plan utilizing sustainable approaches has been developed (Environmental Landscape Design Associates 2011) and is available on the ORNL landscaping website (<http://web.ornl.gov/adm/fo/nr/lm/>). The ORNL campus has a very different look now. Examples of some of the sustainable

landscaping done at ORNL are shown in Figures 11-20. A lot has been accomplished, with a lot more opportunities still to explore.



Figure 11. Bird houses on posts marking stream buffer. Photograph by Patricia Parr.

Maintaining vegetative buffers along the creeks required a change in mindset. Individuals maintaining the grounds had been proud of the neatly mowed grass all the way down to the water.

Putting up bird houses on posts, an idea of natural resources colleague Mike Ryon, and discussing the benefits with those involved, helped them remember to allow the buffer. (photo by Pat Parr)



Figure 12. Rain garden along First Creek. Photograph by Patricia Parr.

Rain gardens such as this one along First Creek, reduce stream bank erosion and flooding by slowing stormwater runoff. They also improve water quality, help to recharge local groundwater supplies, provide nesting sites and habitat for songbirds and other wildlife, and bring beauty and visual interest to the landscape. (photo by Pat Parr)



Figure 13. Prescribed burn of native grass field on west campus. Photograph by Gary Byrd.

Prescribed burns are used as a management tool in native grass communities established in areas that were previously mowed. The burns provide more benefits than the routine mowing and are more cost effective. (photo by Greg Byrd)



Figure 14. A detention basin. Photography by Patricia Parr.

Native plants are now used in detention basins and ponds instead of fescue, as had been done in the past. This detention pond was built to help control sediment runoff as part of a construction project. It requires less maintenance and the native plants provide habitat for native animals and filter sediment and contaminant runoff more efficiently. (photo by Pat Parr)



Figure 15. Monarch tag. Photograph by Patricia Parr.

Powerline rights-of-way are managed to encourage native species and provide pollinator-friendly habitat. DOE participates in Monarch Watch and tags monarchs on the Oak Ridge Reservation as part of research on Monarch migration patterns. (photo by Pat Parr)



Figure 16. Pond plantings. Photograph by Patricia Parr.

Plantings established along the walking path around a once sterile pond highlight different habitat types ranging from wetland, to emergent, to open, dry barren areas. Plants not available at local nurseries were propagated at ORNL for use in the restoration with special cages to protect the newly planted vegetation. Restoration at the ORNL pond provided important information for larger restoration projects on the ORR. (photo by Pat Parr)



Figure 17. Carolina saddlebags dragonfly, *Tramea carolina*, in the pond area. Photograph by Ed Adair.

The pond has become an inviting focal point for staff and guests. Ed Adair, a photographer, became interested in the dragonflies and damsel flies he began seeing and starting taking photos. Through interactions with an entomologist, John Smith, he learned to identify them and added to the list of known species on the ORR. (photo by Ed Adair)



Figure 18. Facility riparian landscaping in a steep area. Photograph by Patricia Parr.

Landscaping at one facility focused on riparian restoration in a very steep, difficult to maintain, area along a creek. Plans developed by Environmental Landscaping Design Associates incorporated the concept of outcropping rocks (similar to areas near the facility) with plantings around them. (photo by Pat Parr)



Figure 19. A drop pond. Photograph by Patricia Parr.

Drop ponds were established adjacent to a new parking garage. They slow the runoff from a parking area on the hill above and the water moves into an expanded wetland before moving through vegetated areas to the creek. (photo by Pat Parr)



Figure 20. Scouring rush/horsetails, *Equisetum hyemale* near the entrance to the Visitor Center. Photograph by Patricia Parr.

Scouring rush/ horsetails (*Equisetum hyemale*) at the Visitor Center entrance is part of the 2003 conceptual landscaping plan by Hawkins Partners, Inc. An ancient, primitive plant that is now part of our fossil energy, it is an appropriate link between our energy heritage and DOE mission. (photo by Pat Parr)



Figure 21. Purple coneflower and goldfinch. Photograph by R. K. McConathy.

Goldfinch and purple coneflower. Delaying removal of seed heads from plants in landscaping allowed wildlife to enjoy them long into the fall, but required re-learning old maintenance traditions. (photo by R.K. McConathy)

Acknowledgments

When the ORNL Natural Resources team gathers to share updates and discuss strategies, one can feel the energy start to grow. Lifelong appreciation to Mike Ryon, Neil Giffen, Greg Byrd, Jim Evans, Kitty McCracken, Ernest Ryan, Kelly Roy, Mark Peterson, Jamie Herold, Trent Jett, Sherri Cotter, Warren Webb, Harry Quarles, Marti Salk, Bruce Miller, Larry Pounds, Bill Johnston, Mike Baranski, Paul Durr, and many interns. The Landscaping Committee literally "broke new ground" in discussing and trying out new approaches. Individuals on this committee not already acknowledged as part of the natural resources team are Cecil Peters, Lynn Cox, Matt Powell, Tammy Harrison, Joan Lawson, Norm Durfee, Curt Maxey, Elizabeth Wright, and Todd North. Management at ORNL, especially Herb Debban, Jimmy Stone, and Tim Myrick, supported the focus on sustainability in landscaping. Thank you to the Tennessee Exotic Pest Plant Council. This organization has played an important role in communicating information about identifying and managing non-native invasive plants and using native plants in landscaping. Appreciative thanks also to landscaper colleagues who kept me learning- Sam Rogers, Leah Gardner, Mark Smithson, Lori McAlister, Avi Askey, Mike Berkeley, and Andy Sudbrock. And my thanks to many mentors over the past 40 years, including Linda Mann, Tom Kitchings, Virginia Dale, Nelson Edwards, Maureen Cunningham, Fred Taylor, Dave Shriner, Frank Harris, Bob Van Hook, and Dave Reichle.

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Patricia (Pat) Dreyer Parr served as President of ASB 1999-2000 and also held offices as Vice President and Treasurer. She recently retired as Natural Resources Manager for Oak Ridge National Laboratory. She continues to be active with the Tennessee Invasive Plant Council and Discover Life in America.



Figure 22. Patricia Parr at Rainy Knob. Photograph by Ernest Ryan.

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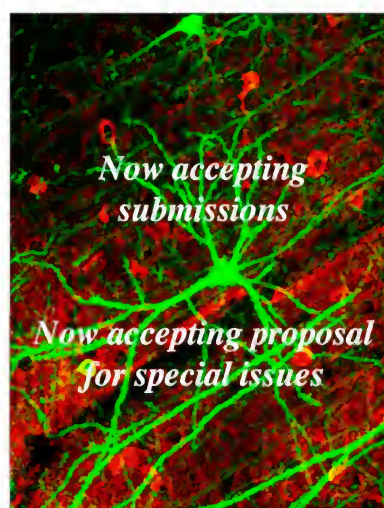
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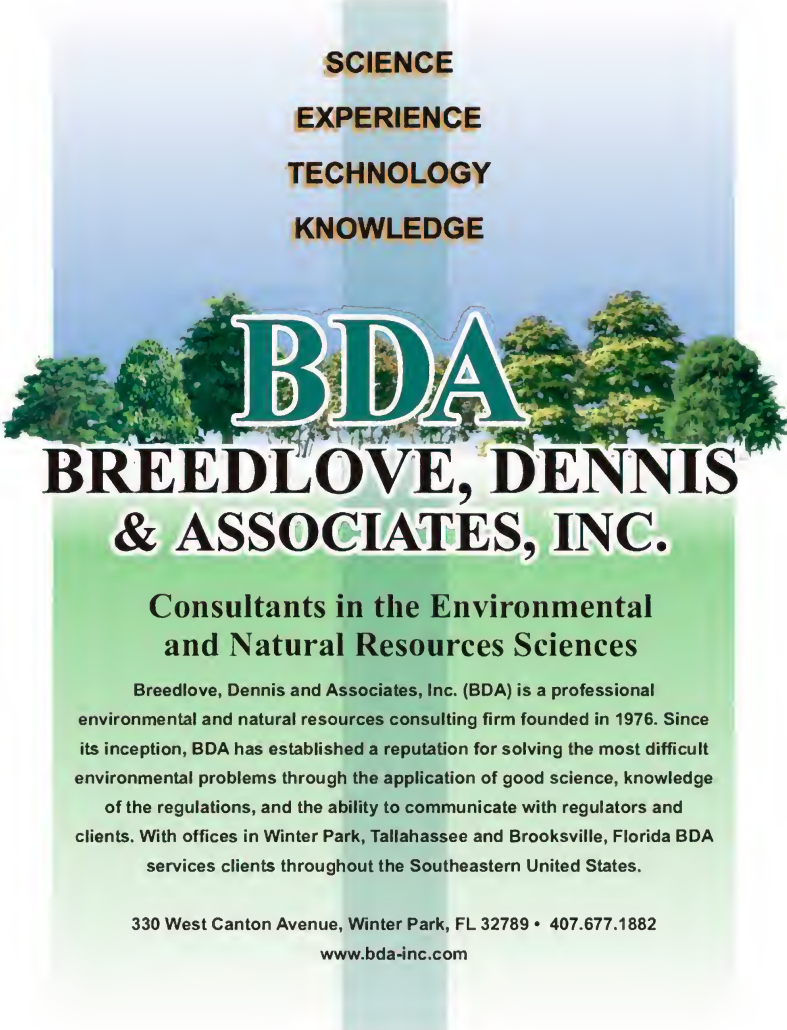


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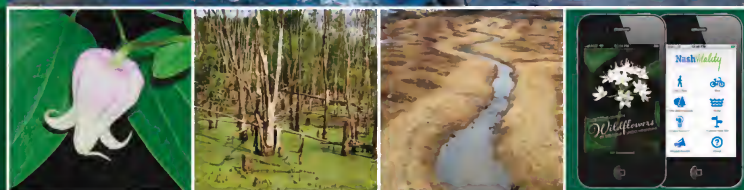
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